

urban WORLD

Harmonious cities

China and India
in focus

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No 1 November 2008

It is a great pleasure to present a new magazine. And indeed it is an auspicious occasion to be doing so at the fourth session of the World Urban Forum in Nanjing, China. UN-HABITAT's new quarterly flagship magazine, *Urban World*, replaces *Habitat Debate* as we move forward with the times, with a more modern magazine for our growing global audience in this rapidly urbanising world.

It is also auspicious that our writers in this inaugural issue include one of the greatest leaders of our times, Archbishop Emeritus Desmond Tutu, the South African Nobel peace laureate, a household name around the world. It is indeed a great privilege too that the pages of this launch issue are graced by some of the most preeminent urban thinkers and doers in the world like H. Peter Oberlander, a founding father of UN-HABITAT, and Professor Emeritus at the University of British Columbia School of Community and Regional Planning, in Vancouver, Canada, the place of our agency's birth in 1978.

Peter Oberlander, author of our first cover story, and Rakesh Mohan, Deputy Governor, Reserve Bank of India, remind us that cities are the greatest legacy of humanity. And as cities are now growing to the point where in the next generation or so it is projected that two-thirds of us will be living in an urban world, they tell us that we had better think constructively and positively about it.

This is especially important these days with the melt-down of mortgage finance systems that have had a terrible contagion on the Wall Street banking system. Where it has been necessary, institutions have had to be nationalised, even in a market economy.

Our new magazine, one of the first products of our Mid-term Strategic and Institutional Plan (2008-2013), is born right at this historic turning point. And indeed all of our eminent authors whose work appears in this inaugural edition and in the future will help us ensure that we bring you a balanced and authoritative report back on these matters every quarter.

The current housing finance crisis in the developed world has demonstrated beyond reasonable doubt that in matters of delivering adequate shelter for all, which is so close to our mandate, that governments must drive the process. They must take the lead both in providing land for affordable housing development, and also in promoting and supervising housing finance systems that are pro-poor and which will cater for all income groups.

It is in our quest for harmonious cities – the theme chosen for the Nanjing Forum and this first issue of the magazine – that we must work harder than ever. It is the duty of governments to ensure that everybody can feel that they live in a clean, democratic, tolerant space in relative comfort and security, and that they have a right to the city. Women especially must have the right to feel safe in the city.

It is only apt therefore, that I use this occasion to disclose here the results of UN-HABITAT's latest research published



in our new flagship report, also launched in Nanjing, the *State of the World's Cities*, namely:

Sixty-two percent of people living in towns and cities in sub-Saharan Africa today live in slums.

Of 2.2 billion inhabitants of the urban areas in the developing world, 810 million people or 36.5 percent are slum dwellers. Sub-Saharan Africa accounts for 175 million slum dwellers, or 62.2 percent of the region's urban population. In all of Asia, 36 percent of the 1.4 billion urban residents live in slum conditions. The highest prevalence in Asia at the sub-regional level is found in south Asia where 43 percent of the urban population are slum dwellers. In eastern Asia 36 percent of the urban population are slum dwellers.

In southeast Asia and western Asia, slum dwellers are relatively low at 27 and 24 percent respectively. In Latin America and the Caribbean, 27 percent of urban dwellers live in slums representing 118 million people.

Even the developed world is not immune. Our survey has established that six percent of the population in developed countries live under slum-like overcrowded conditions and without secure tenure.

These facts tell us therefore that the urbanisation of poverty is arguably the single-biggest development challenge facing the world today.

No longer can we ignore the plight of these slum dwellers who live in life-threatening conditions. The majority of sufferers are always women and the children they support. Nor can we hide from the fact that their numbers are projected to reach two billion by 2030 if current trends prevail. We are facing a serious crisis.

The fact that slums are growing around the world reflects a crisis in governance and government. When many urban dwellers – mostly young people aged 20-40 living in poverty – feel excluded and left behind by their cities and towns, they will react, disrupting social order and harmony.

We know that governments and municipalities simply cannot tackle these problems alone. Much of the financing and much of the expertise for such change has to come from the private sector.

And so our new magazine for the first time carries advertising from companies around the world, including those which have joined the United Nations Global Compact, a UN initiative to encourage businesses worldwide to adopt sustainable and socially responsible policies in the areas of human rights, labour, the environment, social services delivery, and anti-corruption.

With *Urban World*, we are delighted to move forward with some of these private sector partners on the road to sustainable, harmonious cities as part of this vital Compact.

Anna Tibaijuka

Anna Tibaijuka

Conflict in Africa

taking the responsibility to protect

What is to be done when a government is unwilling or unable to stop mass atrocities being committed within its borders? That question, writes **Archbishop Desmond Tutu**, has been asked far too many times in Africa — from Rwanda to Eastern Congo, from Somalia to Darfur.

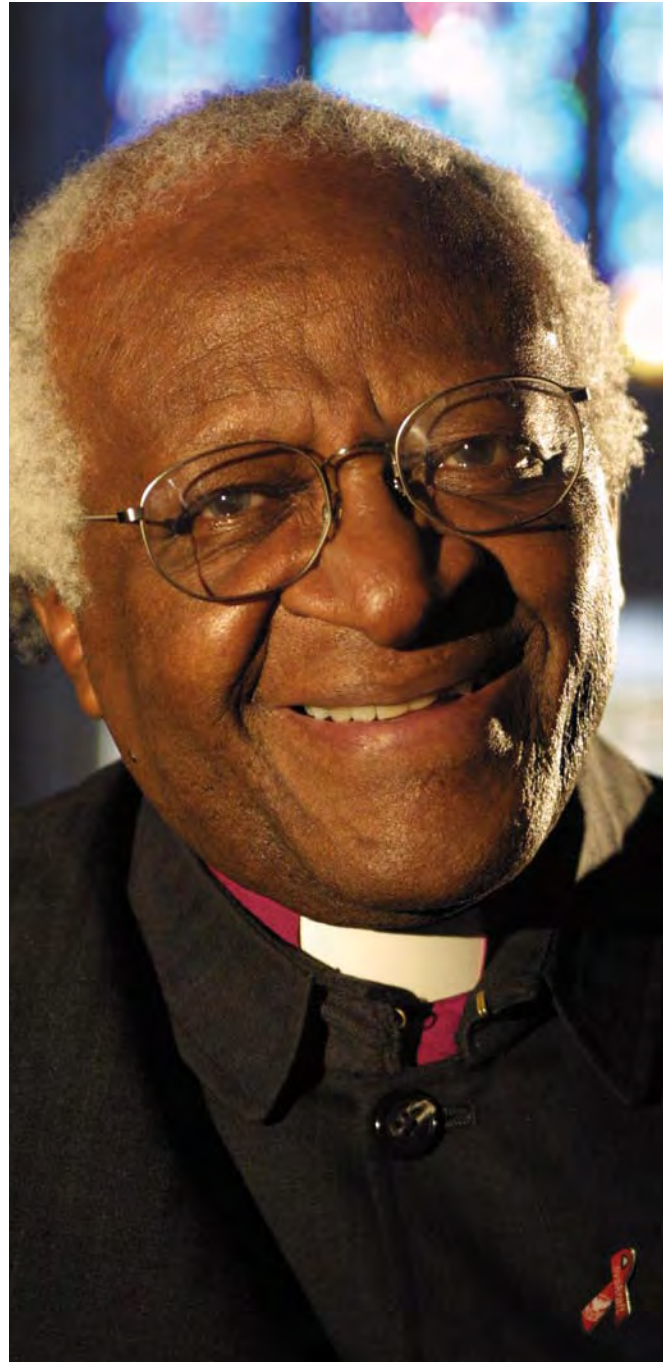
The horrors of conflict in Africa continue today, but there is also a sign of how rapid response, with support from neighbours and the international community, can save lives and bring hope. In contrast to the crises in Rwanda in 1994 and Darfur in 2003, we see today in Kenya the formation of an international consensus that it is unacceptable to ignore violence of the kind that has occurred earlier this year, or to consider the crisis as purely an internal matter of the state.

What has brought about this change in attitude? We cannot underestimate the importance of the leadership and people of Kenya committing themselves to finding a just and equitable way forward.

But it should also be acknowledged that the international community has moved far faster in addressing the Kenyan conflict than it has in similar situations elsewhere: the United Nations has engaged at the highest political levels, the Security Council issued a statement deploring the violence, and the secretary general and the leadership of human rights offices were mobilised. African leaders provided invaluable mediation. This now centres on the work being done by Kofi Annan, Graça Machel and Benjamin M'Kapa, at the request of the African Union.

I believe what we saw in Kenya was action on a fundamental principle — the Responsibility to Protect. At the UN World Summit in September 2005, government leaders pledged that states must protect their populations from mass atrocities and, if they fail, the international community must take action.

Unfortunately, the Responsibility to Protect is frequently misunderstood. It is not a justification of military intervention. It simply requires states to protect their own people and help other states to build the capacity to do the same. It means that international organisations like the UN have a responsibility to warn, to generate effective preventive strategies, and when necessary, to mobilise effective responses. The crisis in Kenya illustrates this: the primary role for outside actors is to protect civilians — not least by helping governments to improve security and protect human rights.



Desmond Tutu is the Anglican Archbishop Emeritus of Cape Town. He won the Nobel Peace Prize in 1984 for his work against apartheid rule in South Africa. He offered this article, based on a longer one published by *Der Spiegel*, to *Urban World*. He wrote it after visiting Kenya as a mediator at the beginning of the year.

Nevertheless, despite some encouraging signs, little progress has been made towards implementing “R2P”, as it is often called, at ►

“I warmly welcome the establishment of the Global Center for the Responsibility to Protect at the Ralph Bunche Institute for International Studies of the CUNY Graduate Center. The birth of this new initiative holds great promise in supporting the endeavours of the international community to take the principle of the responsibility to protect from concept to actuality, from word to deed.” – **UN Secretary-General Ban Ki-moon**

the UN or at the national level. One response that I particularly welcome took place in November when women leaders from around the world convened a summit on global security and pledged to promote international support for the Responsibility to Protect and ensure that women’s views and involvement are included in peace and security initiatives.

The R2P Concept

The Responsibility to Protect—known as R2P—refers to the obligation of states toward their populations and towards all populations at risk of genocide and other large-scale atrocities. This new international norm sets forth that:

- The primary responsibility to protect populations from human-made catastrophe lies with the state itself.
- When a state fails to meet that responsibility, either through incapacity or ill-will, then the responsibility to protect shifts to the international community.
- This responsibility must be exercised by diplomatic, legal, and other peaceful measures and, as a last resort, through military force.

These principles originated in a 2001 report of the International Commission on Intervention and State Sovereignty and were endorsed by the United Nations General Assembly in the 2005 World Summit Outcome Document paragraphs 138 and 139.

Source: The Global Centre

Think how different the situations in the Eastern Congo or Darfur could be if women were fully involved in seeking solutions.

More must be done to bring R2P to life. In February this year in New York, the Global Center on the Responsibility to Protect was launched. Its aims are to build greater acceptance of the R2P norm and to work with others to call attention to how it must be applied in real-world crises. The Elders, the group of leaders brought together last year by Nelson Mandela and Graça Machel, have declared February as Responsibility to Protect month as part of our Every Human has Rights campaign to mark the 60th anniversary of the Universal Declaration of Human Rights.

The Universal Declaration was adopted in the aftermath of World War II, the Holocaust and the use of nuclear weapons.

World opinion came together then to say, “never again”. Yet in the past six decades, we have witnessed mass atrocities committed against others across the globe. We all share a responsibility to do whatever we can to

help prevent and protect one another from such violence.

The place to start is with prevention: through measures aimed in particular at building state capacity, remedying



grievances, and ensuring the rule of law. My hope is that in the future, the Responsibility to Protect will be exercised not after the murder and rape of innocent people, but when community tensions and political unrest begin. It is by preventing, rather than reacting, that we can truly fulfill our shared responsibility to end the worst forms of human rights abuses. ♦

Urbanisation and globalisation

in the 21st century

Many planners and policy makers in rapidly urbanising nations want to prevent urban growth even though millions flock to cities because they intuitively perceive the advantages of city life, says **Rakesh Mohan**, Deputy Governor, Reserve Bank of India. In this article he examines the emerging challenges of the new urban era and says those making the decisions in our modern world had better change their attitudes.



Dr. Rakesh Mohan has researched extensively in the areas of economic reforms and liberalisation, industrial economics, urban economics, infrastructure studies and economic regulation, monetary policy and the financial sector. He is the author of three books on urban economics and urban development and co-author of a book on Indian economic policy reforms.

I would presume that as the majority of the world begins to live in cities, attitudes to cities will change.

Indeed, the views of academics, analysts, policy makers, donors, NGOs, and the like, need to change towards a more positive welcoming attitude to urbanisation and urban growth: it is only if this attitudinal change takes place that we can begin to think constructively about all the serious problems that we are likely to face and to then have a chance of solving them.

We must change our attitude from being afraid of urbanisation to preparing for it. The starting point for justifying this point of view must be the realisation that, despite unprecedented urbanisation over the last 50 years, and indeed the whole twentieth century, overall welfare has actually increased in almost every dimension that we can think of: income growth, poverty reduction, and access to electricity, telecommunications, water, sanitation, education and health.

Never before have as many people had the kind of access to services as they have today. For example, even Mumbai's pavement dwellers have access to the city's municipal schools. And they certainly have better access than where they came from.

But, of course, we have a long way to go.

Widespread all pervading urbanisation is a truly twentieth-century phenomenon. Al-

though we have evidence of cities in antiquity, such as Memphis, Babylon, Thebes, Athens, Sparta, Mohenjodaro, Anuradhapura, among others, there is little evidence of widespread urbanisation in the early years of civilisation. Rome was perhaps the first city to reach a population of one million around the time of Christ. Only in 1800 did London become the second city to reach this size.

In 1800, only two percent of the world's population was urbanised. By the year 1900, only about 15 percent of the population or just 250 million people, lived and worked in urban areas — a number lower than the total urban population of India today, which itself is a tad less than 30 percent of India's population.

Over the next 100 years, the 250 million urban dwellers became 2.8 billion, almost 49 percent of total population. So the pace of urbanisation in the twentieth century was truly unprecedented, and it is a wonder that the world has coped as well as it has. The last 50 years have been truly remarkable in terms of the number of people who were absorbed by the world's cities. In the first half of the twentieth century, the total accretion to urban population in the world was only 500 million. During the next 50 years, from 1950 to 2000, as many as 2.1 billion people were added to the world's urban areas.

The important point that I want to make is that the first 30 years (2000-2030) of this

century will witness a similar addition of 2.1 billion people or thereabouts so the pace of addition in terms of magnitude is again totally unprecedented. The staggering change that took place over the last 50 years is now likely to be compressed in the next 30.

Geographically, the focus of change will now be Asia and Africa. Europe experienced rapid urbanisation in the nineteenth century and in the early twentieth century. North America followed with some lag; and Latin America followed suit in the second half of the twentieth century. The twenty-first century will truly be Asia's urban century. By 2030, about 55 percent of the world's urban population will be in Asia.

What is also interesting is that about 16 percent will be in Africa, about equal to Europe and North America combined.

So the focus in relation to shelter, water, sanitation, and everything else connected with urbanisation will have to be on Asia and Africa: and these two regions themselves contain great complexity as well as heterogeneity.

Now that we have a grasp of the magnitudes: The next 30 years will add another 2.1 billion people to the urban coffers; and two thirds of these will be in Asia.

The fastest-growing cities in the coming decade will also probably be the poorest: ►



When a city cannot accommodate everyone, slums like this in Antananarivo, Madagascar are quick to develop

PHOTO © UN-HABITAT

Dhaka, Ho Chi Minh City, Lagos, and others in Africa. Will they cope as well as their predecessors? Do we need to give them special attention? Where will the resources come from? Or will they raise new problems that we have not yet seen: social, political and economic?

When it comes to cities and the poor, most approaches have concentrated on the issue of slums and shelter for the poor. I believe that we need to separate out the issues of income generation and the provision of living environments.

I do believe that the best strategy for helping the urban poor is:

- Make the city economy vibrant
- Promote employment growth
- Take care of education
- Take care of health
- Take care of clean water
- Take care of sanitation
- Reduce barriers to entrepreneurial entry
- Promote mobility
- Provide security of tenure
- Equalise public spaces

Our approach to the future of urbanisation in the next 30 years has to be informed by the realisation that more urban population will be added during this period than any com-

parable period in history. This growth will be concentrated in Asia and Africa, so the best global thinking on urban management has to be brought to bear in these regions.

The ongoing process of globalisation and technical change will bring many new challenges, including many that cannot be foreseen today. We will certainly have many more large concentrations in Asia and Africa and we will need to learn how to manage their infrastructure needs, both physical and social. We will need to focus more than ever before on the provision of urban amenities. Approaching public space as the great equaliser will have to be part of this approach.

The demographic transitions of this century will be different from those of the last century with overall rates of population growth falling everywhere. And with the weight of the urban population increasing, there will be much more organic urban population growth than from rural urban migration. With increasing longevity everywhere, cities will get more aged everywhere: social security will be problematic, and providing appropriate facilities for the aged will be an issue, including special transport arrangements.

There will also certainly be many poor

people in the growing Asian and African cities. With increasing globalisation and concomitant growth in income inequality, we will have to be careful to forestall natural processes by which the rich try to segregate themselves in urban enclaves. Encouraging growth of entrepreneurship and urban employment opportunities in our cities must be pursued, and not discouraged.

The provision of urban services needs to be done on a sound financial basis for them to be sustainable, but the approach has to be inclusive to engender healthy city growth.

As we cope with the kind of urban growth expected, it is of the utmost importance that city governance and management is made much more innovative, flexible and responsive.

We need intelligent urban governance since problems keep changing and they require dynamic responses.

Urban management needs to become much more professional and attractive so that the next generation of urban managers are the best and brightest. We need at least a dozen international-class schools of urban planning and management in Asia and Africa over the next five years. ♦

How urbanisation can be the engine of growth

In the rapidly growing East Asian region, we are expecting to see 25 million more people moving to cities every year for the next two decades, says **James Adams**, Vice President for the World Bank's East Asia & Pacific Region. His views, excerpted from a speech at the World Cities Summit in Singapore in June 2008, are reproduced here with the kind permission of the World Bank.



A breathtaking view of Singapore, a city constantly reinventing itself and setting new urban development standards

PHOTO © SINGAPORE URBAN REDEVELOPMENT AUTHORITY

I have worked at the World Bank for over 30 years and I remind my colleagues often of the importance of institutional memory and learning from history. I was around when the World Bank provided a loan and technical advice to the Government of Singapore in the 1960s that led to the establishment of the city's public transit system. This included the first congestion charge in the world – something that London and other cities have only begun to introduce in more recent times.

What Singapore has done over the past 40 years to build a truly livable and productive city, we are only just starting to see happen in other major population centres around the world.

The “old thinking”

I have also been around long enough to witness a dramatic change in my own institution's

thinking about urbanisation. The “old thinking” was that urbanisation was a bad thing – that it led to people living in miserable conditions in slums with few opportunities to find work, educate their children or escape poverty. Public policy was regarded as biased towards cities which in turn, increased the attraction of rural people to urban areas. In those days, cities were viewed as incapable of providing the services and the jobs the rural migrants were looking for. We – and I believe the development community generally – were genuinely interested in finding ways to encourage people to stay in rural areas where they could continue their traditional subsistence lifestyles rather than migrate to cities and possibly face the destruction of social networks and have to deal with crime, violence and squalor.

It is in East Asia where we have seen this old thinking about cities and urbanisation

either turned on its head or completely bypassed. East Asia has embraced urbanisation because it creates engines of growth in the form of cities that, if planned and managed well, then offer people opportunities to build productive lives.

The “new thinking”

Nowhere is this thinking more evident than in China. It was Deng Xiao Ping who recognised around 20 years ago that people needed to be able to seek wealth and build productive ways of living. Cities were recognised as “growth poles” – each one sending a wave of economic growth to its hinterland. Between 1980 – when reforms began – and 2000, 268 million Chinese people migrated from rural to urban areas and that movement of people to cities continues to this day. Extreme poverty rates among rural populations ▶

dropped dramatically from 37 percent in the mid-1970s to five percent in 2001. Urbanisation became the basic pillar of China's economic growth and by 2020, we expect that 60 percent of Chinese people will be living in urban areas.

Amazingly, China has been able to absorb more than 370 million people into its cities without the proliferation of urban slums. How has it done this? The experts who work on this at the Bank tell me there are a number of factors behind this achievement. But key among them are good national policies that give Chinese municipalities the authority to introduce and implement regulations governing land use, the transport system and the urban environment. Strong decentralised urban planning and utility management at the city level have also played a strong part in the success.

China also recognised early on that urban development is not possible on the cheap and that building ahead of demand makes a lot of sense. For example, through the 1980s, Shanghai spent five to eight percent of its GDP on urban infrastructure to redevelop the city. Beijing and Tianjin now spend more than 10 percent of their GDP on roads, water and sewerage services, housing construction and transport. China's phenomenal ability to mobilise financial resources for urban development through domestic credit and foreign direct investment is what keeps the funds for cities coming. Add all of this together and you start to see why China's cities have coped more effectively with rapid urbanisation than cities in other middle and lower-middle-income countries.

We have seen a similar story here in Singapore. At independence in 1965, 70 percent of Singapore's householders lived in overcrowded conditions and a third of the population squatted on the city's fringes. Unemployment rates averaged 14 percent and half the people were illiterate. Just over 40 years later, the slums are gone and the city has grown into one of the most productive, creative and functional in Asia. Again, the secret lies in a combination of innovative and forward-looking policies, investments in education and infrastructure, and a concerted bid to attract foreign capital and talent. It's another example of Asia's forward looking attitude to urbanisation. Embracing it rather than fearing it. And taking it a step

further, Singapore wants to share what it has learned with others. The World Bank and the Government of Singapore are currently discussing setting up a regional hub for training urban practitioners – this would draw on and share Singapore's phenomenal knowledge and experience.

This link between well planned, successful cities and prosperity is not limited to Asia. More and more we are also seeing middle income countries like Brazil and Mexico turning cities into growth-inducing hubs that attract human capital and innovation.

It's this new thinking about cities and urbanisation that is a key focus of the World Bank's forthcoming World Development Report, which also provides some calming findings for a debate that is sometimes prone to hysteria.

- For example: It finds that the likely growth of cities has often been exaggerated. The populations of Shanghai, Sao Paulo and London in the year 2000 were about two thirds of what had been predicted in 1974.
- It shows that the current pace of urbanisation in developing countries, other than China, is not unprecedented, mirroring quite closely the experience of today's high income countries at a similar stage of development.
- It also finds that the growth rate of urban populations in developing countries is actually on the decline, having reached its peak in the 1970s although that's not to dismiss the increasing challenge that current rates of growth bring.

The report uses empirical evidence to show that spatial inequality within cities and between regions may increase in the early phases of development but declines with strong economic growth. England is a good example. In the 1830s, earnings in rural England were 25 percent lower than those in cities. Today, average real disposable income is roughly equal in cities, towns and villages.

When we look at the difference between lagging and leading regions, we see a similar pattern. Cambodia and Bangladesh (with GDP per capita of less than USD 300) have gaps in consumption between their leading and lagging areas of 89 percent and 73 percent respectively. But in Colombia and Thailand (with GDP per capita of approximately USD 2,000), the equivalent gaps are about 50

percent. For Canada (with a per capita GDP of USD 20,000), the gap is less than 25 percent.

In effect, cities draw people and firms to areas of higher productivity. Urbanisation is closely related to the way nations have shifted from agrarian to industrial economies and later to post-industrial economies. One of the messages of the World Development Report is that policy makers must recognise the spatial transformations that lie behind these sectoral shifts to enable places to prosper and specialise. No country has grown to high income without vibrant cities. But to be inclusive and efficient, policy makers must see themselves as managers of a portfolio of cities that are specialising and performing different functions according to their size and economic structure.

Climate change

Our strategy will also take into account the impact cities are having on the environment given the demand they place on countries to provide more energy, water, infrastructure and urban services generally. Climate change is a central consideration for governments and planners with cities generating an estimated 70 percent of carbon emissions and with many urban centres located in vulnerable coastal regions. But climate change concerns should encourage us to rethink the shape of our cities, not mislead us into trying to slow down the pace of urbanisation.

Urban energy

Cities and their leaders are now armed with the knowledge and the desire of their constituents to strive for cleaner sources of energy, more effective urban transport systems that reduce dependence on private cars and more energy efficient buildings. As we've heard throughout this Summit, cities all over the world are starting to push harder for green building standards and higher density development rather than encouraging more urban sprawl. At the same time as higher energy prices are helping to increase the density of cities, innovative mayors with foresight are also pushing this agenda with uncommon vigor as we have seen through associations of mayors in the United States, the UK and many other countries. ♦

What role for the city of tomorrow?

Peter Oberlander, a founding father of UN-HABITAT, examines the role cities will play in future human development and outlines the lessons to be learned from the World Urban Forum, which will have its fourth meeting in Nanjing this month.



Peter Oberlander with UN-HABITAT's Executive Director, Mrs. Anna Tibaijuka, in Vancouver at the third session of the World Urban Forum two years ago

PHOTO © CENTRE FOR HUMAN SETTLEMENTS, UNIVERSITY OF BRITISH COLUMBIA

The city is humanity's greatest achievement. It needs care and stewardship to bring its historic role into the new century. As the fourth session of the World Urban Forum convenes in Nanjing, China's ancient capital, it will demonstrate the economic, social, cultural and environmental strength of the city.

It is an enduring artifact, a resilient organism. The city is fragile, yet robust, a global partner in social, economic and environmental progress. The fourth session of the Forum held every two years, will celebrate these accomplishments and lead the way improving global urbanisation.

UN-HABITAT was born in 1976 in Vancouver as a legacy of the First UN Conference on Human Settlements. With the Nanjing Forum, the trajectory has moved from Africa (Nairobi 2002) to Europe (Barcelona 2004) to North

America (Vancouver 2006) and now to Asia. Urbanisation encompasses all continents. It is truly global.

The third session in Barcelona demonstrated beyond doubt that collectively and individually we have the knowledge to cope with the consequences and impact of urbanisation.

We know how to seed well, harvest wisely, and distribute food fairly; how to collect water and distribute it among competing needs. We know how to build securely and successfully, and how to develop and maintain essential infrastructure for the ever-increasing demands of a burgeoning global population. We know how to move goods and services without destroying the environment, and to anticipate climate change and marshal international will to prevent impending disasters.

We even know how to match resources with needs, and how to encourage social and cul-

tural achievements, protecting civil liberties and human rights. We know how to encourage community participation to achieve a common vision and measure its success or failure.

The Barcelona Forum launched a commitment to develop a UN-HABITAT Archive/Exchange as a reservoir of these skills and exchange of experience, available globally and easily. It builds on the past and looks to the future. This project was entrusted to a partnership of UN-HABITAT and the University of British Columbia (UBC) Centre for Human Settlements. This will be a legacy from Vancouver to Nanjing and beyond. It will continue to expand, based on accumulating experience globally. It will be reported on in Nanjing – a treasury of replicable experience of 'Turning Ideas into Action'.

It will be curated and will incorporate print and audio-visual documents, leading to ►



Habitat founding figures, left to right, Enrique Penalosa, Michael Hayward, Darshan Johal, Peter Oberlander and Arcot Ramachandran, at the birth of the agency in 1978

PHOTO © CENTRE FOR HUMAN SETTLEMENTS, UNIVERSITY OF BRITISH COLUMBIA

exchange of tested experience, replicable, and accessible to all on the worldwide web. This index of experience will honour the Vancouver exhortation 'Turning Ideas into Action' by harnessing local solutions globally.

Often we have "re-invented the wheel" to reach for practical solutions. Let us use what we know and build on experience – a theme well regarded in China during its long history of successful urban evolution. The fourth session of the World Urban Forum in Nanjing will celebrate the city as the carrier of civilisation and the guardian of cultural, social and environmental stewardship for an ever-increasing world population.

The city's historic role is deeply embedded in most languages, carrying within its Latin roots 'civitas' yielding to 'civilisation'.

The Greeks gave us 'polis', we thrive in metropolitan communities. Recently, and on a

global scale, all of us proclaim citizenship as allegiance to a nation state, we acquire and change citizenship ceremonially.

The city as an adaptive and transformative institution is embedded in Chinese. The symbol for city corresponds to its dominant influence in a nation's governance. The most common Chinese word for "city" is "chengshi", which equates literally to "a market with a wall around it" – something that distinguishes cities from villages and towns. Another historic linguistic link is through "citizenship" (gong-minquan), literally "public people's rights" or "rights of citizens".

Historically, in eastern and western civilisations the city has offered its residents protection, security and freedom. The city nurtured invention; learning and teaching became an art and a continuing commitment. The city assumed a central social, cultural, and global

economic function, carrying this characteristic throughout the ages and five continents. The world's economic, social and political stability rests on the city's shoulders and deserves celebration. City states preceded the creation of nation states and have endured.

The future of the city

What will the future city look like? Hard to conceptualise, easy to describe, difficult to forecast. It will certainly carry forward its historic role in a global march to economic, social and environmental progress. The city is an instrument of change. It is our only hope for the global survival of an expanding population that will have to share limited resources on a finite globe.

The city will continue to shape settlements and be shaped by them. It has enhanced living and working for over thousands of years on all continents, at different rates for

different reasons, all with strong local, regional and national consequences, including persistent renewal. War or peace – the city will survive as an essential, resilient human institution, renewing itself, and enhancing life globally.

Four roles stand out:

- The city as an engine of economic growth, trade and transformation.
- The city as a social change agent and the crucible of innovation and adaptation; cities as centres of successful, dynamic progressive governance.
- The city, facilitating the exchange of ideas, goods and services, community experience and practices.
- The city as leader in healing environmental damage, championing public health, fair food production/distribution, enabling social equity to increase and as focus of global communication.

In 1976 at the first UN Conference on Human Settlements in Vancouver, Lady Barbara Jackson forecast the world as a “global village”. Since then the world has become one interactive system of urbanisation demanding stewardship, a sharing of resources, anticipating needs, heeding forecasts, and reducing consumption of the world’s limited land and resources. Churchill paraphrased the often quoted “Those who ignore the past are doomed to relive it.”

Recently, China has demonstrated an unprecedented constructive transition from an agrarian economy to an industrial society, from rural communities to urban settlements, connected, interdependent and interactive. From isolated towns and villages to a system of metropolitan communities, the city has helped to transform, modernise, and enhance the lives of a billion people.

Shanghai’s 20 million stand to global account of urbanisation with all its difficulties and accomplishments. I first visited Shanghai under UN auspices 25 years ago. It was a fascinating, historic port, proud of its past and unable to anticipate its future. Since then it articulated its future, marshaled modern technology, harnessed international exchange, hung onto its history and welcomed the world as a global trader.

The fourth session of the World Urban Forum in Nanjing will document the city’s global social, economic and political transformational powers. Indeed the Forum in China’s ancient national capital, is the appropriate place to celebrate the city’s achievement

and embrace its global future through the UN-HABITAT mandate.

From Nairobi to Barcelona to Vancouver and now to Nanjing is a global arc encompassing all Member Nations, encouraging the development of local and regional solutions to a truly global phenomenon – *Urbanisation* towards an *Urban World*.

The city will continue to be the repository of human aspirations, and thereby achieve social, environmental, and economic harmony. Global continuity will depend on the city’s success in harmonising the world population’s physical needs, cultural hopes, social advancement, and environmental impact. With six billion urbanising people on a fixed and land-limited globe, the city’s task is to harmonise this dichotomy.

Its record to date has been positive. UN-HABITAT and all those who participate will continue its historic success.

Urbanisation is a given; the city can ameliorate its consequences and impact. The city is the world’s barometre of impending changes, it is the ‘canary in the mineshaft’. We have to read its indicators, including climate change, unequal distribution of resources, population shifts, and political instability.

The city is our most important and lasting

artifact, sustaining economic, social, and political equilibrium.

Let us celebrate its historic achievements and ensure its future responsibility of promoting sustainable and harmonious urbanisation.


In the past, cities were fortified to defend their citizens against war. This defence is no longer possible. The walls must come down. Civilisation must come out from behind the walls, inducing harmonious development under the aegis of the United Nations committed to achieving and maintaining peace. ♦

Peter Oberlander, a founding father of UN-HABITAT, is Professor Emeritus, Community and Regional Planning at the University of British Columbia. He served as Senior Advisor to Canada’s Commissioner General for the third session of the World Urban Forum in Vancouver in 2006. He initiated Ottawa’s Ministry of State for Urban Affairs as its inaugural Secretary (Deputy Minister). Earlier, he played a pivotal role in helping organise the first UN-HABITAT conference in Vancouver in 1976. In this article, he expresses confidence that the harmonious city, which he so cherishes, can be humanity’s greatest guarantor of peace in our new urban world.



Congestion beyond control? The heart of downtown Monrovia, Liberia

Photo © UN-HABITAT



Looking to make your community sustainable?

Canada Mortgage and Housing Corporation (CMHC) is proud to launch its new Sustainable Community Planning Workshop Series at the World Urban Forum 4 (WUF4) in Nanjing, China.

The modules in the series explore pressing topics and key factors to consider when planning a sustainable community that integrates social, economic and environmental issues.

Register for CMHC's Training Session at WUF4:

Integrated Sustainable Community Planning Through Stakeholder Engagement

Canada Mortgage and Housing Corporation is Canada's housing agency. CMHC International offers a complete range of consulting services from housing finance to housing policy with the ultimate goal of improving housing affordability and accessibility.

Visit our website at (<http://cmhc.ca/en/hoficlincl/cmhcic/index.cfm>) for more information on how we can bring this training and other services in housing and housing finance to you.

Chinese and Indian cities: a telling contrast

China and India are the two demographic giants of the planet. They count together 2.5 billion inhabitants, representing 37 percent of the world population (estimated at 6.7 billion people in 2008). About to become economic giants, they are seriously shaking traditional power relations in the international arena, writes **Daniel Biau**, Director of the Technical Cooperation Division at UN-HABITAT in Nairobi.

New World Economic Order is in the making, as called for by the Non-Aligned Movement since the Bandung Conference of 1955.

If the power of nations varies according to the economic policies adopted by their governments, its fundamental basis lies in their demography, in the numbers of inhabitants, and the number of available and active workers. History has many times demonstrated that the most populous countries are potentially the most powerful. And this power is also correlated to the territorial distribution of the population as in the cases of China and India. Economic comparisons between the two countries appear more and more frequently in specialised pub-

lications. But they rarely emphasise the role of cities in the development of these economies.

Urban growth

A comparison can be made using figures provided in the latest report of the UN Population Division, *World Urbanisation Prospects: The 2007 Revision*. These statistics are the only internationally recognised data, accepted by all UN member states. They are obtained in collaboration with national bureaus of statistics. It is from here that we can make a first comparison, from the demographic viewpoint, between the two countries and their agglomerations.

In 1985, China had 1,067 million inhabitants, India 771 (296 million less). Forty years

later, in 2025, China and India will have approximately the same population, 1.45 billion. In 2008 China has 1,335 billion inhabitants, India 1,185. The current gap between the two countries is therefore about 150 million. India's demographic growth is much faster than China's, due to a lack of family planning. The present growth rate of the population is estimated at 1.4 percent per annum in India, compared to a low 0.58 percent in China. China is getting older. This presents medium-term risks, similar to those that Europe has to face to maintain an inter-generational solidarity as the share of the active population decreases.

In 1988 China and India had the same rate of urbanisation, 25 percent. In 2008 China is ▶



The population growth rate in China is currently estimated at 0.58 percent annually

PHOTO © C. RINGO

43 percent urban, India only 30 percent. The rates of urban growth are 2.7 percent per year in China (going down towards two percent) and 2.4 percent in India (going up towards 2.6 percent). At the start of the reform, in 1985-90, the urban population of China was growing at the very high pace of five percent per year.

If China has enormously urbanised during the last 20 years (in absolute terms the

In India, also in 2008: Mumbai (19.3), Delhi (16), Kolkata (15), Chennai (7.3), Bangalore (seven), Hyderabad (6.5), Ahmedabad (5.5) and Pune (five million in 2010). The parallels are striking: the two big ports in the lead, followed by the two capitals. The figures in parenthesis correspond to the physical agglomerations (the only pertinent ones for international comparisons) and are not related to administrative boundaries, which

jing – Tianjin – Tangshan) in the north, of the Changjiang/Yangtze delta (Shanghai – Nanjing – Hangzhou) in the centre and of the Zhujiang/Pearl River delta (Guangzhou – Shenzhen – Hong Kong) in the south. We may add two secondary corridors: the Shandong peninsula and the Yangtze valley. The extreme case of Shenzhen, a city whose population increased tenfold in two decades, illustrates the boom of the Special Economic



Tianjin, with 7.3 million people, is one of many Chinese cities that has urbanised dramatically in the last 20 years

PHOTO © TUDOU MAO

number of urban residents doubled, from 288 to 577 million), India has also followed the same universal trend, but at a slower pace (urban increase from 205 to 350 million). In 2030, according to UN projections, China should be 62 percent urban and India 41 percent. China is likely to reach the 50 percent urban threshold by 2016.

Main features of the urbanisation process

As far as the size of large cities is concerned, China and India are rather similar. The two countries have indeed the same number (eight) of cities of more than five million people. In China they are in 2008: Shanghai (15.3 million), Beijing (11.3), Guangzhou (nine), Shenzhen (7.8), Tianjin (7.3), Hong Kong (7.3), Wuhan (7.3) and Chongqing (6.6).

often include large rural territories (the Autonomous Municipality of Chongqing which gathers 32 million inhabitants over 82,300 km² – it is de facto a ‘small’ province – and would be, by such an administrative definition, “the second most populous city in the world” after Tokyo!).

It should be noted that the eight largest Indian cities are much better distributed on the national territory than their seven largest Chinese counterparts, all located in the eastern coastal region with the exception of Wuhan and Chongqing. In India the hexagon Delhi – Kolkata – Chennai – Bangalore – Mumbai – Ahmedabad nicely covers almost the entire country.

In China, urbanisation intensity focuses primarily on three eastern corridors: those of the Bohai industrial region (Bei-

Zones and the magnitude of the migrations to the coastal provinces since the beginning of the economic reform in the 1980s. If it were a separate country, the Pearl River delta economic zone, with 65 million people, would be the world’s 18th-largest economy and its 11th-biggest exporter, ahead of India. According to *The Economist*, it has enjoyed an astonishing average annual growth rate of 17 percent for the past quarter century.

In 2008, China had 100 cities with populations of one million or more, 140 cities with more than 750,000 people and 670 cities with more than 100,000 inhabitants while India counts only 35 million plus cities (known as metro-cities), 57 cities above 750,000 inhabitants and 400 cities above 100,000 inhabitants.

The urban network of what should not be dubbed 'useful China' (the coastal strip, 300 kilometres wide, representing approximately 10 percent of the country's area but generating probably 75 percent of its Gross Domestic Product) is dense and relatively balanced while India remains a country of big villages, and medium-sized towns, spatially well distributed but poorly inter connected.

the British colonisation from the end of the 18th century to the creation of New Delhi). In both cases the urban wave went from north to south.

After history, economy is the second explanatory factor of the urbanisation processes, and in turn it can be partly explained by the urbanisation dynamics. If the two countries had the same per capita income in 1987, the figure has quadrupled in 20 years in

Nothing differs more between the two societies than the role of the State apparatus. The State is strong in China (but shrinking, the central ministries have been downsized during the last two decades). The State is weak in India, both in the legislative and regulatory areas and in guiding public investment as well as in control and supervision of private and public companies. This is reflected by a policy of deliberate urbanisation and municipal



Urban planning is imperative for continued growth in cities

PHOTO © UN-HABITAT DANIEL BIAU

Fundamental structural differences

A comparative analysis of the key urbanisation factors is necessary to identify the structural differences between the two countries, because they give their respective urbanisation processes specific and sometimes opposite physiognomies.

History is important in both countries which are also places of very ancient civilisations. The history of Chinese urbanisation is essentially endogenous (moving from the Yellow River to the Yangtze basin), in spite of two famous northern dynasties: Mongol (Yuan) and Manchu (Qing). It is a fundamentally exogenous process in India (started in the Indus and Ganges plains but mostly determined by invaders coming from central Asia in the 13th century to establish the Delhi sultanate, then by the Moghol empire as of 1526, and

China and doubled in India. At present the GDP per capita (Purchasing Power Parity) in China is therefore approximately twice that of India, USD 7,600 against USD 3,800 in 2005. The Chinese take-off has been much faster than India's, particularly thanks to the dynamism of its cities linked to an enormous investment in infrastructure, and to the earlier start of the reforms. The annual growth rate averages 10 percent in China, eight percent in India.

The specialisation of China in manufacturing industries and of India in information and communication services should not overshadow the progressive diversification of the two economies and the growing share of high technologies in both GDPs. Chinese exports (USD 800 billion in 2006) represent 10 times Indian exports, but the relative gap will probably diminish in the coming years.

activism in China. This contrasts with the largely spontaneous urbanisation in India associated with a liberal *laissez-faire* marked by a continuous and lengthy search for consensus on all urban matters (a British legacy? London never had a Master Plan...). However the federal Government of India appears to have woken up in recent years, not only to defend the interests of its large firms in international negotiations, but also to help the states respond better to the infrastructural needs of the same firms.

In fact, if the quality of national, regional and municipal infrastructure has made a great leap forward in China, here India remains under-developed. This is linked to the investment rate, very high in China (45 percent of GDP) and still too low in India (25 percent). Similarly Direct Foreign



The rates of urban growth in India are increasing but in China the rate is falling

PHOTO © NICKY CASEY

Investments are huge in China (USD 80 billion in 2005) while they are extremely targeted in India (USD 6.6 billion in 2005). It is becoming more and more urgent for India to drastically increase its investments in infrastructure.

The political and fiscal decentralisation is systematic in China, particularly since 1994, but much more uneven in India despite the 74th amendment to the Constitution passed in 1992. Paradoxically Chinese leaders are somewhat mute on this point (China should be seen as a well-unified country), while Indian politicians talk a lot of their almost philosophical belief in local virtues.

But it can be noted – this is the best indicator of effective decentralisation – that the income of local authorities are high in the large Chinese agglomerations (thanks to the sale of public land and corporate taxes) but

depend from the uneven goodwill of the various states in the Indian Federation. The annual per capita income of municipalities averages USD 200 in Eastern China, more than 10 times the Indian equivalent figure.

Monetary or income poverty diminishes regularly in the two countries – this is why the world will certainly meet the Millennium Development Goals. But the poverty of living conditions, which has diminished at the same speed in China, persists in most Indian cities. This “housing poverty” is visible in urban densities, higher in India, and in the relative share of informal housing in the urban fabric (roughly 50 percent in India, about 10 to 15 percent in China). On the other hand social inequities, striking in India, are increasing in China, specifically between unregistered migrant workers and the official urban population.

The recent launch, in 2005, of the National Urban Renewal Mission aimed at reducing poverty in 63 Indian cities, supported by a federal budget of USD 12.5 billion over seven years, should be compared to the absence of any central Government subsidy to housing in China.

The active role played by NGOs and CBOs in India, mainly in poor neighbourhoods, can on the other hand, be contrasted with the influence of the Chinese Communist Party (70 million members) in the appointment of all managers (in the public and private sectors) and the regulation of tensions. Two fundamentally different systems. This may compromise the Urban Renewal Mission if India tries to adopt – this is likely – the Chinese methods of heavy renovation (demolition-population, transfer-reconstruction) rather than the



Shanghai illustrates the success of the Special Economic Zones in China

PHOTO © GARY TAMIN

international recommendations on the incremental upgrading of slum conditions with the participation of communities themselves.

In recent years China has produced an enormous quantity of high-rise housing estates, targeting the expanding middle-class, built by public and private developers supported by municipal incentives (close to 10 million units annually). In the meantime the production of social housing by public agencies has not increased in India where there is an evolution towards high-cost speculative housing. The Chinese miracle is indeed more this massive production of flats at USD 50,000 per unit – that responds to the demand thanks to the mobilisation of often

hidden family savings – than textile or washing machine exports. However, this does not exclude the prohibitive prices (Western style and level) of luxurious apartments in the posh areas of all large cities.

Evident similarities, common interests

Although there are essential differences between China and India, there are also many points of convergence linked to the common challenges facing both countries. The recent political and ideological rapprochements are more than smoke screens.

Chinese and Indian leaders both see their cities as the engines of innovation, growth and export in a globalised economy from

which they draw maximum benefits. But they are discreet on this shared vision because politically, they have to take well-anchored ruralist traditions into account and show an interest in the hundreds of millions who will continue to (over)populate rural areas during the next two or three generations.

They both intend to encourage the strengthening of local powers, more autonomous and dynamic in China but emerging progressively in India. The very important role of sub-national (regional) levels of government (provinces in China, states in India), including in urban policy development and financial transfers, is of course essential in view of the immense size of national territories.

Acute regional disparities, insufficient natural resources (specifically in terms of energy) and huge environmental problems (air and water pollution, energy intensive production modes, obsolete heavy industries, etc.) constitute major constraints and threats that both decision-makers and ordinary people are beginning to be conscious of: China invests USD 40 billion a year to improve its living environment, but pollution costs her twice that much by its impact on productivity, health and loss of human lives.

The rapid expansion of capital markets and mortgage finance, as the last missing element to ensure the full enforcement of the market economy, can be observed in the two countries, in a somehow chaotic but cautious way.

Indian capital markets and financial institutions are generally seen as more efficient and transparent than their Chinese counterparts.

The fast development of technological skills, mostly among the younger generation, should be viewed as a real danger by industrialised countries (OECD members). This is due in part to the numbers of engineers and technicians on domestic markets who will soon look for international opportunities (including by staying home – see Bangalore).

Already Chinese construction companies are winning public work contracts around the world. However, China and India are suffering a shortage of technical and managerial skills in many areas. Both countries will need to invest a lot in higher education in coming decades.

Finally the adherence to Western modes of consumption – private car, fast food, supermarkets, malls, modernist architecture, ►



Gangtok - just one of India's growing cities

PHOTO © SUBHADIP MUKHERJEE

sky-scrapers, sometimes with local refinements perceived as kitsch or ostentatious by foreigners, contrasts with an unhidden national pride, and among the middle and upper classes, a sharp competitive spirit and an almost blind faith in the future and the unlimited prospects of Asian capitalism.

A brief comparison with the Western world

China and India demonstrate once again that cities are simultaneously the cause and consequence of development, that there is a direct correlation between urbanisation and socio-economic progress. In his masterful synthesis on city history Paul Bairoch tested and illustrated this law in many regions during various periods of time. And it emerges clearly out of our Sino-Indian comparison.

While Chinese urbanisation has been traditionally self-centred, at least until the 19th century, its dynamics have completely changed since the 1980s. Its recent expansion can be compared with the process followed by the United States a century ago, between 1880 and 1930, i.e. with a concentration on coastal areas (East Coast and California in the USA, East Coast in China) and in a large inner employment basin (one could suggest a

fascinating parallel between Chongqing and Chicago, and between Sichuan and the American Midwest). Obviously Shanghai is becoming the new New York and Pudong intends to challenge Manhattan. The main difference is that US cities were working primarily for the domestic market and Chinese cities target in priority external markets (although the Chinese domestic market is also expanding fast). But the growth rate is similar. Traditionally introvert China has become extravert in a single generation.

The spatial development of India looks more like the one of continental Europe around 1800, with a hierarchised urban network, under-developed pockets corresponding to the most rural regions and deficient infrastructure. In fact the Indian economy is an archipelago economy, made of high-tech islands surrounded by an under-equipped hinterland. Extravert until 1947, India became introvert during more than 40 years, until the reform of 1991 that initiated a vast liberalisation process (a well publicised success of the IMF), still on-going.

Chinese and Indian cities appear to have in common the abolition of the centre-suburb dichotomy, which constitutes a feature of both European cities (which have a rich cen-

tre) and American cities (where the wealthy live in suburbs). With some exceptions (e.g. Bangalore) Asian cities are becoming more and more multi-centred, due to the invisible hand of land markets and investor strategies.

China and India are the new faces of capitalism. They have replaced Japan in the mind and fears of the Western hemisphere. Rightly so, for they clearly threaten rich countries by their dynamism and strategic positioning in the current globalisation of the world economy.

As far as city management is concerned, the lessons emanating from our comparison are clear, albeit not extraordinarily original: one must decentralise according to the subsidiarity principle, invest more in urban and inter-city infrastructure, adopt modern cutting-edge methods and technologies (such as satellite-based urban information systems), try to improve the quality of life to make cities more attractive, promote metropolitan regions or urban corridors associating cities, towns and rural areas and favouring intra-regional synergies. Only then the current process of "glocalisation" (more local politics, more global economy) would benefit more countries, in the north and the south. A lot remains therefore to be done at local and sub-national (regional) levels, including in OECD countries, at a time when the announced decline of nation-states becomes a tangible reality.

In China and India, cities are the locomotives of the new growth models. In spite of some heavily loaded wagons they pull the economy in the right direction, and this is reflected not only in their foreign trade performances, but also in the reduction of poverty and in a new, yet insufficient concern for the environment.

Urban specialists should devote more attention to the evolution of these booming cities. They are driving the current Asian revolution.

The old Chinese saying: "if you want to be rich, you must first build roads" is once again confirmed in the 21st century. ►

*Born in France, **Daniel Biau**, is an Urban Planner and a Doctor in Social Sciences, specialised in urban and housing policies. He has more than 30 years of international experience.*

India's eco-city programme

A city doesn't have to be brand new to earn the "eco-city" title. In India there is an urgent need to improve living conditions in many towns, villages and cities. Hence, in 2000, the Ministry of Environment and Forests began to discuss the possibility of creating Indian eco-cities.

In 2001, the ministry began an eco-city programme for the Kottayam-Kumarakom region in Kerala State, southwest India. Then, in 2002, the Central Pollution Control board took on the challenge of planning and co-ordinating the project with the aim of making the towns of Vrindavan, Tirupati, Puri, Ujjain, Kottayam and Thanjavour more eco-friendly.

The towns were selected based on criteria such as size, tourism potential and environmental improvement needs in the early phase of a three-stage plan

that will culminate in the development of 10 eco-cities across India.

Based on the success of the clean-up projects in these cities, the Indian government, which is working closely with German Technical Cooperation, will develop strategies to bring in public-private partnerships and private investments along with municipal collaboration to implement other eco-city projects across India.

The project is especially needed in India due to overcrowding, pollution problems, pressure on natural resources, the existence of slums and, what the eco-cities website refers to as "deplorable" socio-economic, living and sanitary conditions for the majority of the urban populace.

As a rule, improvements are being made to the existing environment: traffic systems, maintenance of drains, solid waste management, river and lake con-

servation, and plantations and landscaping. The intention is to exact change while remaining harmonious at the same time.

The eco-city environmental projects are expected to be innovative, non-conventional, practical and sustainable, cost effective using local materials and design techniques, simple in design creating visible impact, and replicable.

They are expected to ensure conservation of the environment, flora and fauna, and to provide adequate water supplies, efficient public transport, adequate green park space and recreation areas, safety from hazards, clean air and surroundings, energy efficiency using the latest technologies, and show evidence of soundly planned development.

The following gives an outline of plans published by the Press Information Bureau in India. ♦

Kottayam

The project in Kottayam is aimed at rejuvenating the Mundar River and Kacherikadavu boat jetty and canal as they have severe siltation and pollution problems. The embankment of the canal is also being reinforced.

Puri

Drains around Lord Jagannath Temple are being repaired and covered, and the drinking water point at Lion's Gate near Lord Jagannath Temple is being improved, as is the public toilet near Narendra tank. Rejuvenation of the Markendeya Tank in Puri. Garages are being relocated from their previous position along Grand Road to the vicinity of Jagannath temple and an Eco-Automobile Park is being developed in Puri.

Ujjain

In Ujjain ongoing improvements are being made to the Mahakal Temple, and the polluted Rudra Sagar Lake is being cleaned. Hopes are to encourage more tourism to the area.

Vrindavan

The project in Vrindavan focuses on improving the historic core of the town, located around Rangnath Temple. The

roads are being re-surfaced, additional signage erected, street lighting put in place and more parking spaces are being created. Most importantly, sanitation is undergoing improvement with the installation of drinking water facilities and public toilets. Gandhi Park is set to undergo restoration and the non-profit making trust, the Indian Heritage Foundation has taken up the job of improving a two-kilometre stretch of pathways from Kaliadaha Ghat to Kesi Ghat.

Tirupati

In Tirupati drainage in the northern, southern and western side of the Gobind Raja Swamy Temple is being improved, as is sanitation, with the construction of public toilets and drinking water facilities. An attempt is also being made to beautify the area with ornamental landscaping and the planting of flowerbeds.

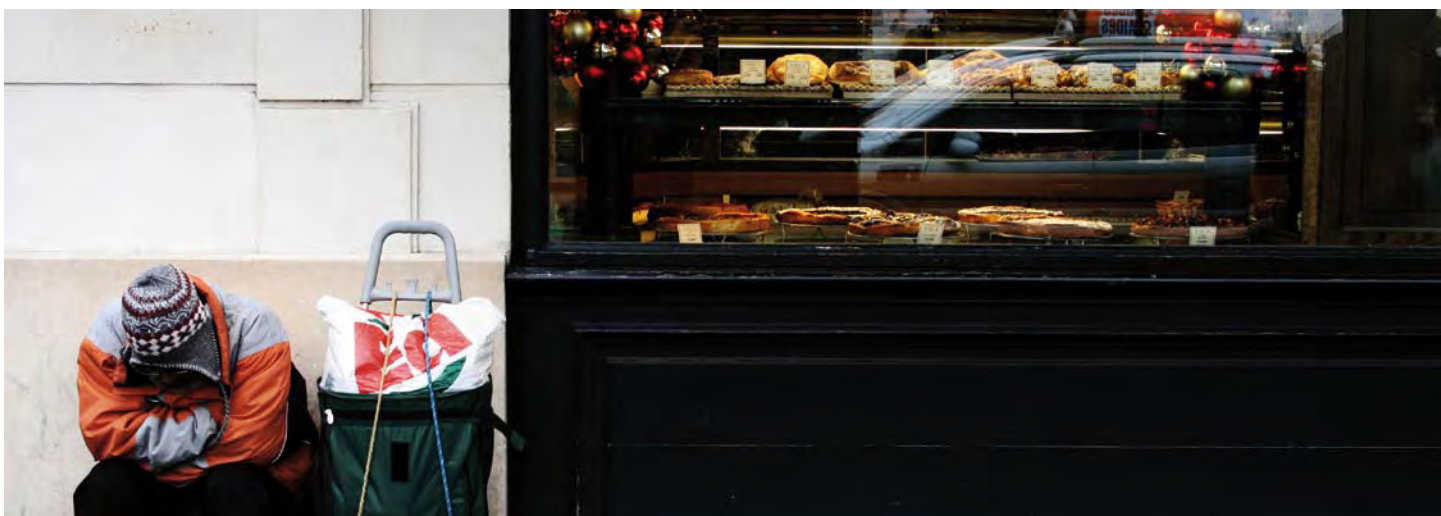
Thanjavour

The preservation of water systems is a priority in Thanjavour. Presently used and potentially useable aquifers are being protected from further degradation and being utilised to harvest rainwater.

Kirsty Tuxford

Not so harmonious cities

Huge income gaps and walled-off gated communities are the symbols of urban inequalities in many countries, writes **Eduardo López Moreno** in this global overview of regional trends.



There is an ever-increasing gap between rich and poor in cities today

PHOTO © EMILIANO SPANA

In many cities, wealth and poverty coexist in close proximity: rich, well-served neighbourhoods and gated residential communities are often situated near dense inner-city or peri-urban slum communities that lack even the most basic services. Income distribution (measured through Gini coefficient levels) varies considerably among less-developed regions with some areas, notably Africa and Latin America, exhibiting extremely high levels of urban inequality compared to Europe and Asia, where urban inequality levels are relatively low.

Latin American and Caribbean cities are among the most unequal in the world, with Brazilian and Colombian cities topping the list, closely followed by some cities in Argentina, Chile, Ecuador, Guatemala and Mexico. Urban inequalities in this highly unequal region are not only increasing, but are becoming more entrenched, which suggests that failures in wealth distribution are largely the result of structural or systemic flaws.

“The fault lines of urban poverty and inequality create an explosive mix for xenophobia.”
South African writer **Frank Meintjies** in a recent article for Amandla Publishers.

In Africa, urban income inequalities are highest in Southern Africa, with South African and Namibian cities exhibiting levels of urban inequality that rival even those of Latin American cities. Cities in sub-Saharan Africa that have recently emerged from apartheid systems of governance tend to be the most unequal. South Africa stands out as a country that has yet to break out of an economic and political model that concentrates resources, although the adoption of redistributive strategies and policies in recent years have reduced inequalities slightly.

Unfortunately, rising economic growth rates in several African countries have not reduced income or consumption disparities. On the contrary, urban inequalities in many African cities, including Maputo, Nairobi and Abidjan, remain high as wealth becomes more concentrated. In general, urban income inequalities in African countries tend to be higher than rural income inequalities, and northern African cities tend to be more equal than sub-Saharan African cities.

Asian cities, on the other hand, tend to be more equal than cities in other parts of the

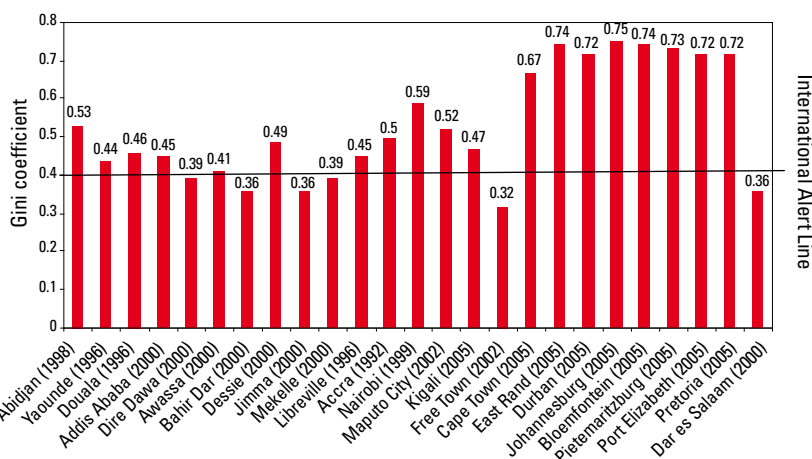
developing world, although levels of urban inequality have risen or remain high in some cities, including Hong Kong and Ho Chi Minh City. High levels of urban inequality have also been reported in cities in Thailand and the Philippines. Cities in China tend to be more equal than other Asian cities, with Beijing being among the most equal city in the region, although some Chinese cities, such as Shenzhen, are experiencing relatively high inequality levels similar to those of Bangkok and Manila.

consequences that have a destabilising impact on societies. Inequalities create social and political fractures within society that can develop into social unrest. This is particularly true in places experiencing both high levels of inequality and endemic poverty, which increase the risk of political tension and social divisions that can threaten national security and economic development. Social unrest and insecurity, in turn, reduce incentives for investment and force governments to increase the amount of public resources

ing countries indicates that since the 1980s nearly half of these countries managed to reduce levels of urban inequality while enjoying positive economic growth.

Malaysia, for instance, has been steadily reducing levels of urban inequality since the early 1970s through the implementation of pro-poor policies and through human resources and skills development. Similarly, Indonesia's "Growth, Stability and Equity" programme has ensured that income distribution and poverty alleviation are inte-

Gini coefficient in selected cities of Africa



Measuring inequality

The Gini coefficient is a useful metric for understanding levels of inequality with regard to distribution of income or consumption. It is the most widely used measure to determine the extent to which the distribution of income or consumption among individuals or households deviates from a perfectly equal distribution. A Gini coefficient of 0 indicates perfect equality, whereas a Gini coefficient of 1 indicates perfect inequality. In other words, higher values denote higher levels of inequality. Gini coefficient values that are higher than 0.4 generally denote high levels of inequality, and often reflect institutional or structural failures in income distribution.

Source: UN-HABITAT, Global Urban Observatory, 2008 Data are from National Statistics Offices, South African City Network, etc.
Note: Gini data are mix of income Gini and consumption Gini. Africa (income: 15 cities, consumption: 11 cities).

China's booming economy has also led to rural-urban and regional disparities, with populations in cities along the eastern seaboard enjoying significantly higher per capita incomes than rural populations living in remote western parts of the country.

In Bangladesh, India, Pakistan and Indonesia, levels of urban inequality are generally low and are comparable to many cities in Europe, Canada and Australia. However, recent analyses suggest that India will experience rising levels of urban inequality in the future as a result of liberalisation and industrialisation policies coupled with lack of adequate investment in provision of public goods to the most vulnerable populations.

High levels of inequality in cities can lead to negative social, economic and political

devoted to internal security – resources that might have otherwise been spent on more productive sectors of the economy or on social services and infrastructure.

Evidence also suggests that the benefits of economic growth are not realised in societies experiencing extremely high levels of inequality and poverty. Societies that have low levels of inequality are more effective in reducing poverty levels than those that are highly unequal. Inequalities also have a dampening effect on economic efficiency as they raise the cost of redistribution and affect the allocation of resources for investment.

Levels of inequality can be controlled or reduced by forward-looking mitigation efforts on the part of governments. UN-HABITAT analysis of urban inequalities in 28 develop-

ing components of economic growth and development.

Policies promoting equity in Rwanda have also ensured that the high economic growth rates that the country is currently experiencing do not increase inequality levels. These countries have shown that it is possible to grow economically without increasing inequality levels, and that reduction of inequalities is, in fact, a pro-growth strategy. ♦

Article excerpted from UN-HABITAT's latest biennial flagship report, *State of the World's Cities 2008/9*. Eduardo López Moreno is in charge of the report.

The century of the city

Half of the world's population already lives in urban areas and by the middle of this century, most regions of the developing world will be predominantly urban.



Cities in Latin America and the Caribbean, such as São Paulo, are the most urbanised in the developing world

PHOTO © AFONSO LIMA

Urban growth rates are highest in the developing world, which absorbs an average of five million new urban residents every month and is responsible for 95 percent of the world's urban population growth. In the 1990s, cities in the developing world grew at an average annual rate of 2.5 percent. More than half of the urban areas in the developing world grew at the high annual rate of between two and four percent or more during this period, while more than one-third grew at the moderate or slow rate of less than 2 percent a year.

Although urban growth rates are slowing

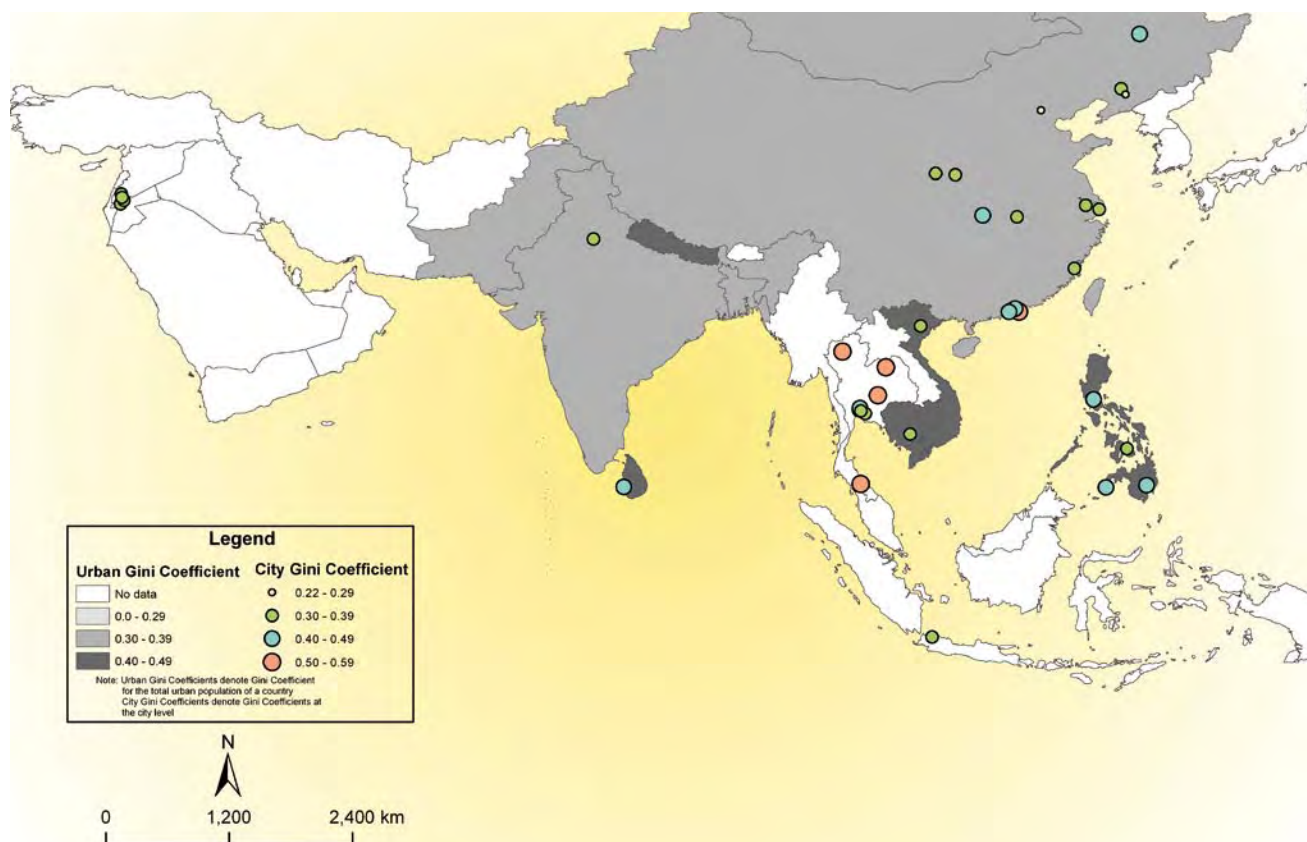
down in most regions of the developing world, levels of urbanisation are expected to rise, with the least urbanised regions of Asia and Africa transforming from largely rural societies to predominantly urban regions during the course of this century.

By 2050, the urban population of the developing world will be 5.3 billion; Asia alone will host 63 percent of the world's urban population, or 3.3 billion people, while Africa, with an urban population of 1.2 billion, will be home to nearly a quarter of the world's urban population.

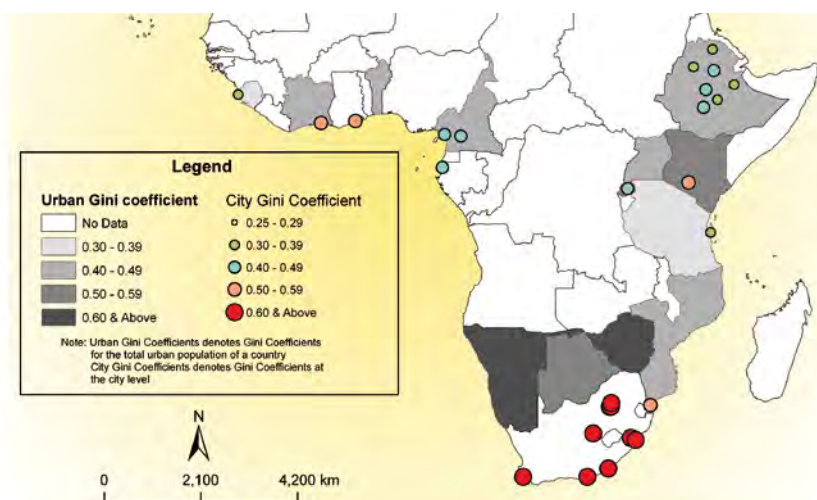
In sharp contrast, the urban population of the developed world, including countries of

the Commonwealth of Independent States, is expected to remain largely unchanged, rising only slightly from just over 900 million in 2005 to 1.1 billion in 2050. Many cities in this region are actually experiencing population loss, largely due to low rates of natural population increase and declining fertility rates. The phenomenon of declining populations is generally associated with the developed world; however, the phenomenon of shrinking urban populations can be observed in some cities in the developing world. There is, therefore, a need to combine new methods and techniques that respond to urban growth

Urban and City Gini Coefficients in Asia



Urban and City Gini Coefficients in Africa

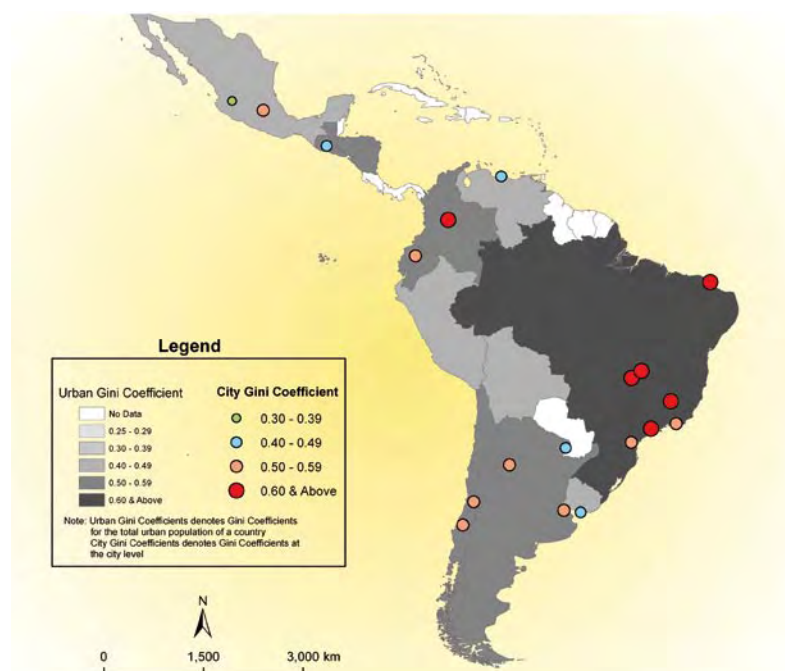


and expansion in some cities, while responding to the emerging trend of population and economic decline in others. Smart planning for growth should be combined with smart planning for contraction if more harmonious urban development is to be achieved.

Urban change in the developing world does not always follow identical patterns or trends. Urbanisation in Africa is characterised by disproportionately high concentrations of people and investments in the largest city (in most cases, the capital) and by very high annual slum growth rates of more than four percent. Urbanisation in the region, especially in sub-Saharan Africa, is therefore characterised by slum formation.

In Asia, urban populations are shifting or relocating to suburban locations or satellite towns linked to the main city through commuter networks. This phenomenon is particularly prevalent in large Indian cities ►

Urban and City Gini Coefficients in Latin America and the Caribbean



Ring towns, or satellite cities, have sprung up in Mumbai due to shifting populations

PHOTO © ASIF AKBAR

Population of the world's megacities, 2007 and 2025

2007		(Thousands)		2025		(Thousands)
1	Tokyo	35,676		1	Tokyo	36,400
2	Mexico City	19,028		2	Mumbai	26,385
3	New York-Newark	19,040		3	Delhi	22,498
4	São Paulo	18,845		4	Dhaka	22,015
5	Mumbai	18,978		5	São Paulo	21,428
6	Delhi	15,926		6	Mexico City	21,009
7	Shanghai	14,987		7	New York-Newark	20,628
8	Kolkata	14,787		8	Kolkata	20,560
9	Buenos Aires	12,795		9	Shanghai	19,412
10	Dhaka	13,485		10	Karachi	19,095
11	Los Angeles-Long Beach-Santa Ana	12,500		11	Kinshasa	16,762
12	Karachi	12,130		12	Lagos	15,796
13	Rio de Janeiro	11,748		13	Cairo	15,561
14	Osaka-Kobe	11,294		14	Manila	14,808
15	Cairo	11,893		15	Beijing	14,545
16	Beijing	11,106		16	Buenos Aires	13,768
17	Manila	11,100		17	Los Angeles-Long Beach-Santa Ana	13,672
18	Moscow	10,452		18	Rio de Janeiro	13,413
19	Istanbul	10,061		19	Jakarta	12,363
				20	Istanbul	12,102
				21	Guangzhou, Guangdong	11,835
				22	Osaka-Kobe	11,368
				23	Moscow	10,526
				24	Lahore	10,512
				25	Shenzhen	10,196

Source: UN Population Division, World Urbanisation Prospects, 2007
Note: Population are for urban agglomeration, not city proper.
Orange box: new megacities

where ring towns or “bedroom communities” have formed around cities like New Delhi and Mumbai. Urban growth patterns in China, on the other hand, have tended to produce “city regions” along the eastern coastal belt, which are responsible for much of the economic growth experienced by the country in recent years. In countries like the Philippines and Indonesia, the trend has been to promote the growth of intermediate cities in order to direct migrants away from the largest city.

Latin America and the Caribbean is the most urbanised region in the developing world, with one-fifth of the region’s urban residents living in cities with populations of five million or more. However, one of the most distinctive features of urbanisation in the region is the rapid growth of small cities, which are home to nearly 40 percent of the region’s urban population. Another distinctive characteristic of Latin America and the Caribbean is that urban growth is often the result of people moving from one city to another, and not from rural areas to urban areas. ♦

Source: UN-HABITAT, *State of the World's Cities 2008/9*.



The National Housing Finance Corporation (NHFC) was established by the National Department of Housing as a Development Finance Institution (DFI) in 1996, with the principal mandate of broadening and deepening access to affordable housing finance for the low to middle income South African households.

VISION

The NHFC is the leader in the development of the low to middle income housing market.

MISSION

Provide innovative and affordable housing finance solutions to the low to middle income housing market.

WHAT THE NHFC DOES

Make housing finance accessible and affordable for the low to middle income households

During the 2006/07 financial year, the NHFC's main priorities were to build the infrastructure for the implementation of the retail model and to adopt a more aggressive project implementation approach. The Transformation of the Corporation in view of its expanded mandate has culminated in the building of the Retail Business Operating Model. This allows the NHFC to deepen the access and broaden the reach to the lower income segments of the market. The NHFC Retail Offering is being piloted in partnership with the SA Post Office, which will provide access to home loans for the majority of households in our target market.

Target Market

Based on the broadening of our original mandate, that was to serve the low to moderate income groups, to include middle income groups, the NHFC has considered the emerging middle income market as a key group that requires support. Increasingly, these are households that earn more than R7 000 per month, but cannot afford the increasing house prices that are typical of the middle income segment. These households are left out of the middle income market and are pushed to the lower end of the market. Research in this regard confirms that this is due to unavailability of housing stock priced between R100 000 and R500 000.

Innovation

The NHFC has developed an innovative financial instrument, that will be launched and rolled-out to the market shortly. The instrument will substantially address the above problems and will significantly lower the entry threshold for homeownership, thus promoting broader access to housing for this particular group of households.

Support Breaking New Ground (BNG) Strategy by facilitating the development of sustainable human settlements

In adopting a more aggressive project implementation approach instead of being reactive, the NHFC is embarking on the following initiatives:

- Targeting developers, both private and public, instead of the traditional social housing approach;
- Offering technical assistance through the funding of expenses such as feasibility studies, training for builders amongst other interventions in order to unlock projects;
- Providing bridging finance to Municipalities involved in housing development projects; and
- Financing land acquisition as part of the housing development project costs.

Facilitate the development of a viable and sustainable low to middle income housing finance market

Work with Banks by assuring a facilitative and integrative role in the process, and thus to enhance the scale of delivery and the funds flow in the target market.

Aggressively facilitating both public and private partners to significantly increase the supply of housing appropriate for the low to middle income housing market.

Working with banks and other partners to develop solutions needed to ensure that every South African, with a reasonable source of income, has an opportunity to find affordable, decent and suitable housing. Implementing risk-enhancement mechanisms to ensure greater lending to the target market and the delivery of the lowest cost to the low to middle income households.

Advocate the promotion of an enabling environment in the low to middle income housing market.

The impact of desalination in the Middle East and Asia

It is a cruel irony that 71 percent of the Earth's surface is covered by water, yet only a small percentage of this is drinkable. But, as **Jonathan Andrews** reveals, with developments in desalination technology, what was once a prohibitively expensive process restricted only to oil-rich nations, has become an affordable option for many cities.

The International Desalination Association (IDA) states that there are now 13,080 desalination plants in operation around the world in almost 100 countries. This may seem a sizeable amount, yet the plants only produce 0.5 percent of global water use. Almost half of these plants are found in the Middle East, where energy is cheap and water scarce. But many other cities in the US, Australia, Spain, India, Africa and China are now turning to the technology to meet growing demands.

Historically, there has always been a human interest or dream of turning the abundance of salt water into drinkable water. The realisation of this began during World War II, when military establishments operating in arid areas needed a way to supply their troops with potable water and developed very basic models.

The movement took a giant step forwards in the 1950s and 1960s when the US government, at the behest of President John



Lisa Henthorne, President of the IDA

PHOTO © IDA

develop the industry. At the same time the Middle East was discovering the advantages of its vast oil fields and the potential of desalination.

realised the potential of its huge fossil fuel resources, thermal desalination plants were built alongside power plants."

This simple concept involved using the heat from the power plants to boil water, collect the steam and then condense it to make pure water. "It was relatively efficient, because it used the waste heat to create the water," adds Henthorne.

Advancements in membrane technology, that is necessary in the reverse osmosis process involved in some desalination plants, have increased dramatically in the past 30 years. Reduced energy use, lower overall treatment costs, and raised water quality all make it an attractive alternative.

"They have broader applications to countries that don't have the resources of fossil fuel like the Middle East; they use less energy and don't need to be co-generated next to power plants," explains Henthorne.

Perth, on the drought-ridden western coast of Australia, is one city that has not traditionally been a market for desalination, but has recently built the largest plant in the southern hemisphere.

Dow Water Solutions, a desalination company whose reverse osmosis technology is at the heart of the Perth plant, believes its appeal is increasing.

"Previously, the high costs associated with desalination hindered interest in abundantly available seawater as a potential water source," says Karen Dobson from Dow Water Solutions. "The successful operation of the Perth plant is further proof that we have in

"Previously, the high costs associated with desalination hindered interest in abundantly available seawater as a potential water source."
– Karen Dobson, Dow Water Solutions

Kennedy, established the Office of Saline Water and then later the Office of Water Research and Technology in a major effort to

"Desalination took off in the Middle East, due to a complete lack of water," explains Lisa Henthorne, President of the IDA. "When it



Seventeen percent of Perth's drinkable water is now sourced from its new desalination plant

PHOTO © WATER CORPORATION

our hands a technology that can help alleviate water supply problems in an affordable and sustainable way.”

Some 17 percent of Perth's drinkable water is now sourced from the Indian Ocean, in which the equivalent of an Olympic sized swimming pool, full of pure, clean water is pumped out every 25 minutes.

Perth's Lord Mayor Lisa Scaffidi says that

the city is no longer solely reliant on rainfall as the major source of water.

“Given our drying climate and our fall off in rain, this is a great development,” says Scaffidi. “We will run the plant flat out all year and when the water is not going into the system for immediate consumption it can be used to top up our dams.”

There are, however, environmental con-

cerns posed by desalination plants. Environmental groups, such as the World Wildlife Fund (WWF) are concerned about the energy that the plants use and the greenhouse gases they churn out. A large desalination plant can plough through enough electricity in one year to power more than 30,000 homes.

In its report, *Making water: Desalination – option or distraction for a thirsty world?* ▶



Ksar Ghilène, in Tunisia, uses photovoltaic solar energy to power its desalination plant

PHOTO © INSTITUTO TECNOLÓGICO DE CANARIAS

the WWF believes that the impact these plants can lead to brine build-up, increased

greenhouse gas emissions, destruction of prized coastal areas and reduced emphasis

on conservation of rivers and wetlands.

"Many of the areas of most intensive desalination activity also have a history of damaging natural water resources, particularly groundwater," says Jamie Pittock, Director of WWF's Global Freshwater Programme. "Large desalination plants might rapidly become 'the new dams' and obscure the importance of real conservation of rivers and wetlands."

While it is generally agreed that desalination plants make sense as one of part of the solution to water supplies along with conservation, the World Wildlife Fund believes that they have a limited role in water supply. "Simultaneously there needs to be a substantial commitment to research into potential, long-term cumulative impacts of an industry that is rapidly scaling up its presence in many areas of the world," concludes the WWF report on desalination.

Mobile solutions to meet growing water needs in UAE, Oman and Qatar

With increasing populations, heavy demands on infrastructure and energy, and one of the highest water consumption rates in the world, the Middle East and North Africa are under pressure. By 2010 the regions thirst is set to increase to 8.8 billion cubic metres a year. General Electric and Septech have recently signed agreements with the United Arab Emirates, Oman and Qatar to meet this demand by providing mobile water systems for the next 20 years.

Housed in a 12-metre mobile container, the units are easily deployable and through reverse osmosis technology can treat brackish, salt and wastewater and produce from 1,000m³ per day.

The mobile units are able to meet all regulatory requirements around the world and can operate independently of a power source. "They are not limited exclusively to unplanned emergency situations, rather they present solutions for a range of additional service scenarios. The units are able to be rapidly deployed and in op-

eration within short periods of time and are able to treat sea, brackish and treated sewage effluent," says Ashruf Kamel Chief Strategy Officer for Septech.

"With the global consumption of water doubling every 20 years, it has been estimated that by 2025 more than one third of the world's population will not have adequate access to drinking water," adds Kamel. "These alarming figures do not even encompass the growing industrial demand for water supply."

To date the technology has successfully been deployed for a variety of desert-based mega projects, delivering water quantities from 1,000m³ to 10,000m³. Without any current municipality infrastructure in place, the units have ensured that developers can commence with construction and deliver their projects according to timelines set.

"Whether for domestic or industrial application, our mobile water systems are capable of suiting the needs of multiple industries including; construction, power, chemical processing, pharmaceuticals and food and transport," explains Kamel.

Septech is sending more than one hundred units to the region and is attracting interest from Turkey, Libya and Australia in 2009. ♦



The 12-metre mobile containers can produce 1,000m³ of water each day

PHOTO © SEPTTECH

Perth Lord Mayor Lisa Scaffidi defends the new plant as one of the first in the world to be entirely powered by renewable energy, sourcing electricity from a wind farm.

“We have also began an intensive monitoring programme to gauge the impact on the bay in which the studies have so far found that there will be no adverse ecological effects,” she confirms.

Spain, with the largest number of desalination plants outside the Middle East, has also focused on improving energy efficiency in its plants. Previously they would use 18kw/h to produce 1 cubic metre of water. Now, its newest plant in Barcelona, due to be completed next year will use only 3kw/h per cubic metre of water, 45 percent of which will be solar power.

The fact that there have been no long-term studies on the environmental impact concerns Pittcock from the WWF. “As with any relatively new engineering, such as large

solar hot water system. Many argue now that these rainwater tanks will be obsolete and unnecessary after the plant is built, which will eventually provide up to 150 billion litres of water a year.

Melbourne University scientist, Peter Coombes, believes that rainwater tanks have the potential to provide between 80 billion and 120 billion litres of water a year for the city and at a lesser cost.

Although his reports do not say it, their implication is that an alternative water strategy could save taxpayers and homebuyers money by reducing reliance on expensive public water facilities, such as desalination plants.

“There is a window of opportunity to refocus Melbourne as a sustainable city, which includes rainwater harvesting, waste water recycling and water/energy efficiency and we cannot lose this chance by pursuing silver bullets from a narrow economic perspective,” says Coombes.

repairing pipes and harvesting rain,” he said. “There is no need for a desalination plant as with improved demand, leakage and resource management, it would be possible to ensure adequate water supplies for London without it.”

Despite these concerns, more and more cities are increasingly turning to desalination plants. In California alone some 20 seawater desalination plants have been proposed, including a USD 300 million facility near San Diego.

China, India, and Africa with rapidly growing middle classes, are building more and more desalination plants to meet demands from growing industries and have even moved into the technological research of plants.

Water-starved Chennai, on India’s south-east coast, will soon host the country’s largest desalination plant, where the city’s water requirements are expected to double by mid-2031. This year Algeria opened the largest de-



Many new plants are entirely powered by renewable energy

PHOTO © WATER CORPORATION

dams that grew up in the 1950s, the negatives become known when it is too late or too expensive to fix. What we need most is a new attitude to water not unchecked expansion of water engineering.”

Other less harmful technologies and water systems may also lose out to the big promises of desalination. Melbourne, Australia, will see one of the largest desalination plants built on its shores. Already the city provides tax rebates and statutes that require all new housing to have either a rainwater tank or

Even London, with its wet and rainy image, has needed to turn to this technology due to ever increasing pressures on its water supply, albeit after a lengthy court battle after the ex-mayor of London, Ken Livingston opposed it.

Ken Livingston’s argument was that it was senseless to consume vast amounts of energy to treat brackish river water when 790 million litres of drinking water is lost everyday in London due to leaky water pipes. Five times the amount the plant will produce. “They (Thames Water) should invest more in

salination plant in Africa to provide water to one million residents in the capital.

Not all plants are designed or limited to large urban centres. Ksar Ghilène is an isolated Tunisian village of 300 inhabitants in the Saharan desert. Drinking water is supplied to the village through the use of a brackish water reverse osmosis desalination plant driven by photovoltaic solar energy. After two years of operation the plant has successfully produced more than five million litres of fresh water. ♦

A call to the business community

As the United Nations opens its doors to new partnerships with the private sector, UN-HABITAT sees the business community as a vital partner for sustainable urbanisation, writes **Christine Auclair**, Chief of UN-HABITAT's Private Sector Unit.

The United Nations has started opening its doors to the business world as essential partners for change. Given that we are now at the dawn of a new urban era with half of us living in towns and cities for the first time in history, and given that towns and cities are growing faster than ever before, the challenges are daunting enough.

But they are made considerably more difficult by the crisis of widespread urban poverty with the global number of slum dwellers forecast to rise from one billion today to an estimated 1.3 billion by 2020.

UN-HABITAT is keenly aware that the private sector is a vital partner which has to be engaged if the world's cities are to achieve sustainability. More than ever before, pressing

urban challenges require concerted approaches to land, basic infrastructure and services, affordable housing solutions and accessible

sectors representing sizeable shares of gross domestic product. The private sector is key to driving economic development, contribut-

The private sector is a vital partner, which has to be engaged if the world's cities are to achieve sustainability

housing finance systems, and service delivery that include the private sector as a prime player.

Urban development requires considerable financial investments in infrastructure and real estate, both important national economic

ing to employment and wealth creation. The old French adage 'Quand le bâtiment va, tout va' (when the construction sector is well, all is well) is perfectly apt as shown by the booming economies of those countries that are driven by a thriving construction sector.



Mr. Mark Malloch Brown, the former Deputy-Secretary-General of the UN

PHOTO © FCO

Take China for example, which today accounts for half the global construction volume. It is also enjoying one of the highest economic growth rates worldwide. But the China example needs to be contextualised. It should not be seen as the recipe for development, especially in today's global quest for reduced consumption patterns. However, the link between urban development and national development, correlated to the private sector's growth cannot be underplayed.

There is a general fear that the private sector, in its struggle to meet international competition, might push governments to adopt urban policies less dedicated to the needs of communities or social equality. There is also concern that local governments are becoming more visibly market centred, promoting 'good business climates' and courting the private sector to lure jobs and money. Liberalisation leads to structural changes with critical implications for urban policy and planning. It also has great impacts on urban living conditions.

Civil society is continuously warning the international community about the danger of such trends that work to the detriment of the lower income bracket in society and against social development and security.

"While we already have decades of experience working with governments in the developing world, we now recognise the importance of working with other development actors, from grassroots civil society organisations to multinational enterprises, to ensure that the poor are not left behind," said Mr. Mark Malloch Brown, the former Deputy Secretary General of the UN in a foreword to a UNDP publication entitled, *Private Sector: Building Partnerships for Development*.

Preserving safety nets for the urban poor and strengthening local governance capacity to balance market forces are important objectives supported by the UN. In fact, it has to play a critical role in bringing together the private sector, governments – including local governments – and civil society to keep a balance that allows a harmonious urban development.

But while it is increasingly important for the UN to partner with the private sector, global civil society watchdogs have long warned about the clashing motives of private sector players—particularly multinational corporations—and the UN.

While business is about minimising costs and maximising profits, the UN is about

promoting international co-operation on development, humanitarian assistance, human rights and security.

The UN positions itself here by saying that the private sector can contribute in several ways to the realisation of UN goals through the mobilisation of "financial resources, access to technology, management expertise and support for programme".

The UN partnership approach intends to go beyond the so called clashing motives of businesses and those of the UN. To concur with that approach, the business community seems to increasingly promote a new discourse whereby those differences are ironed out.

places for doing business, otherwise we don't have a platform for doing what we're supposed to do," said Mr. Bjorn Stigson, President of the World Business Council for Sustainable Development.

To establish successful partnerships between the private sector and the UN, it is crucial to understand the motives and requirements of both. At the same time, issues such as climate change have triggered a new quest for common objectives. The private sector is increasingly aware of the importance of sustainable social and economic development for the successful conduct of its activities. Private sector actors also recognise the need



PHOTO © WBCSD

"Business cannot succeed in a society that fails." — Bjorn Stigson, President of the World Business Council for Sustainable Development

"What I'm saying to business is that business cannot succeed in a society that fails - we have a clear business interest in helping to create functioning societies that are good

to invest in human resources and infrastructure in order for businesses to thrive.

They need to invest in the city of tomorrow. ♦

The car of the future?

Electric cars and their hybrid cousins have been around for decades but as **Jonathan Andrews** reveals, it is only recently that with a combination of technological advancements and political and social backing, they are now seen as a serious alternative to the internal combustion engine. Welcome to the cyclocity and roboscooter world of the future ...



City Car concept from MIT

IMAGE © FRANCO VAIRANI-MIT SMART CITIES GROUP

Previously the domain of trendy movie stars, ageing former presidents, and retirement villages, electric cars are now being touted as a viable solution for city transport. As cities face ever-increasing growth, combined with congestion and high-energy costs, politicians are keen to advertise their green credentials by supporting viable modes of transportation with low carbon dioxide emissions.

London mayor, Boris Johnson, has set up the Electric Vehicle Partnership for London with the aim of boosting the number of electric cars from 90 in 2003 to 1,600 by the end of 2008. There are also plans to add 100 more public recharging points to the 40 spread around the UK capital.

Support is also coming from the UK government, whereby Prime Minister Gordon Brown wants to make Britain “the European capital for electric cars.” To make the cars more financially attractive to customers, the government has also exempted them from vehicle excise duty and from London’s congestion charge, and electric car owners offers will have free parking in the city centre until 2011.

Previous obstacles to the spread of electric cars have been the limited range of vehicles and the scarcity of recharging points in cities. The Head of Group Research at Volkswagen, Jürgen Leohold, cautioned: the internal combustion engine will continue to dominate for at least 20 years. It’s important to recognise that there is not a single solution.

But as politicians jump on the clean energy bandwagon and provide financial incentives, the vehicle industry is looking at electric vehicles with new impetus.

The French-Japanese alliance, Renault-Nissan, aims to build an all-electric car for mass production by 2010, and is already working with start-up, Better Place, to install 500,000 recharge points in cities in Israel, Denmark and Portugal. Its main focus has been to cities that are net energy importers that face difficulties in paying high fuel costs.

Innovative approaches to the way cars are designed, used and owned are also gaining attention. A car that is stackable and uses a robotic driving mechanism is how a team from the Massachusetts Institute of Technology (MIT) sees the future.

The City Car, created with design input from Frank Gehry and financial backing from General Motors, is designed as a lightweight electric vehicle that can be cheaply mass-produced, rented by commuters under a shared-business model, and folded and stacked like

grocery carts at metro stations or other central sites.

Consisting of four electric motors embedded in each of its wheels it will enable more efficient use of power by also dispensing with the transmission and driveline. An eggshell glass plate forms an aerodynamic roof and the windshield.

The proposed hiring scheme is simple: you merely swipe your credit card, roll out the first car in the stack, and drive off.

A number of studies have been undertaken by the team which identified cities such as Bangalore, Florence, Zaragoza, Shanghai, Taipei and Kaohsiung where the City Car concept would dovetail with existing public transport. “It can work in unison and also be like a parasite that leeches on to mass-transit systems,” said Mr. Chin.

The MIT team are creating a workable prototype, which will then be only a year away from mass production. So far the team



Bicycle-sharing schemes prove a popular transport choice in many cities

PHOTO © ERIC CHAN

“The goal is to target very dense cities that have congestion problems,” says Ryan Chin, a senior team member in MIT’s Media Lab. “Our aim is to implement it in cities where a public transport system exists to play a

have received strong interest from San Francisco, which according to Mr. Chin would be a great launch pad.

“There is a tremendous urge to be green there and I think San Francisco could be a

“The City Car is like having valet parking or a waiting taxi wherever you want it, with the added advantage that the vehicles recharge while parked in stacks.” — **Ryan Chin, MIT**

complementary extension of public transport, and to act as a surrogate. It’s like having valet parking or a waiting taxi wherever you want it, with the added advantage that the vehicles recharge while parked in stacks.”

very good location especially with so many tourists,” Mr. Chin said. “They want to be the leaders. We think that if we could get one city to commit it could go on.”

The MIT team have already developed ▶



The bicycle and new e-bikes are a favourite mode of transport for many Chinese

PHOTO © KAREN WINTON

a working prototype of the Roboscooter, a lightweight, folding electric motor scooter, developed with Sanyang Motors and Taiwan's Technology Research Institute.

"Barcelona, Zaragoza and Taipei have shown a level of interest in adopting it. The

"The city's 3,000 rental bikes have racked up about 16 million kilometres since the programme started in May 2005," said Lyon's Deputy Mayor, Jean-Louis Touraine. "We believe we have saved 3,000 tonnes of carbon dioxide from being spewed into the air. Over-

"The ultimate goal is to create a system whereby people can select an appropriate vehicle for the mission at hand, be it scooter, bicycle or car."

Roboscooter will be a precursor to the City Car, because the concepts are the same," said Mr. Chin.

The precedent for this type of shared personal transport is the bicycle-sharing scheme that has been set up in European cities. The first such programme was initially launched three years ago in Lyon, France's third largest city, as an ambitious project to cut traffic, reduce emissions, improve parking and enhance the city's image as a greener, quieter more relaxed place. Called Cyclocity, it was deemed so successful that Barcelona, Stockholm, Toulouse and Paris quickly followed suit with their own systems.

all vehicle traffic in the city is down by four percent and bicycle use has tripled, as the programme has boosted a boom in private bicycle use and sales."

The Cyclocity concept, was developed from the communal ideals of the hippy 1960s and 1970s, when bikes were left on the street for anyone to use. Eventually these "bicycle sharing" schemes failed as the bicycles were either stolen or became irreparable.

Cyclocity relies on sturdier vandal-proof bicycles and a credit card or refundable deposit is required to discourage theft.

"It has completely transformed the landscape of Lyon – everywhere you see people

on bikes," said M. Touraine. "The programme was designed not just to modify the equilibrium between transport modes and reduce air pollution, but also to modify the image of the city and to have a city where humans occupy a larger space."

The Bicing system, set-up in Barcelona last year, is jointly funded through streetcar parking fees, which contribute €2.23 million a year and also the yearly subscription fee of €24, which makes it the cheapest transport option available.

The first 30 minutes are free and thereafter increase in half-hour blocks of a €0.30 charge. Use of two hours or more is discouraged with a €3 charge per hour. This ensures that each bicycle is used between 10 and 15 times a day.

Carmen Gramage, an office worker who lives just outside the centre of Barcelona, says that it gives an incredible sense of freedom. "It's a great concept. I use it almost every-day. Most of the time it's faster than the bus or metro, especially for short distances, a lot cheaper and it helps reduce pollution."

The bicycle stations are conveniently linked into already existing metro stations, bus stops and car parks to assist in seamless transport connections.

Due to its success and popularity with users many other cities are keen to introduce their own systems. These include London, Dublin, Sydney, Melbourne and Toronto.

The bicycle itself is also undergoing technological improvements. Synonymous with China for years as a form of transport, it still holds appeal to those Chinese who have not been caught up in the wave of wealth sweeping across the country. More than 20 million e-bikes – bicycles with electric motors that assist the rider – were built in 2007, according to *China's Clean Revolution*, a new report by Climate Group.

The e-bike outpaced domestic auto sales in 2007 two to one, and holds a market value worth USD 6 billion. Giant Bike Co., one of the largest bicycle companies in the world, makes the e-bike and is aiming to produce at least five new models and five upgrades of previous models every year, which will enable the company to ship over a million e-bikes each year to cities all over the world.

Merging all three systems is what the team at MIT are aiming for. "The ultimate goal is to create a system whereby people can select an appropriate vehicle for the mission at hand, be it scooter, bicycle or car," said Mr. Chin. Changing people's ideas about transport is also a key for the future systems to work. "The technology is here and the time is ripe." ♦



When innovative mobility leads to a sustainable future

More than half the world's people now live in cities and every year millions more migrate to expanding urban centres. In the face of such rapid urbanisation, a major challenge for the 21st century is the sustainable development of cities.

This requires cooperation – city planners, architects and mobility providers working together – as well as a common understanding that cities exist to serve all of their inhabitants, irrespective of social status or physical ability.

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Schindler believes that sustainable urban development depends on continuous, assured mobility throughout our cities. Schindler designs products and technologies for all urban environments from low-rise residential buildings, through stations, airports and hospitals, to commercial and high-rise towers.

Schindler's vision is one of barrier-free urban environments. A major focus of its business is developing traffic management systems to improve people flow, and it actively encourages young architects and schools of architecture to incorporate an «Access for All» philosophy into their design and curricula. For more information, go to: www.schindleraward.com

Schindler moves 900 million people every day – the whole world every week.



Brazil leads the fight for energy efficiency



The Itaipu Dam provides 25 percent of Brazil's energy needs

PHOTO © ALICIA NIJDAM

Brazil is often cited as a world leader in biofuels when it comes to energy initiatives. But this ignores the country's pioneering role in the fight to use existing resources more efficiently. **By Jonathan Andrews.**

The International Energy Agency (IEA) predicts that world energy consumption will grow by an alarming 55 percent between 2008 and 2030. At that rate, the number of oil barrels consumed each day would increase by 36 percent to 118 million and the use of the dirtiest fossil fuel, coal, would increase by 73 percent with disastrous effects on the environment.

Countries face a stark choice: add sufficient capacity to meet these energy needs or become much more efficient in energy consumption to meet demand. Brazil, with one of the highest electricity prices in the Latin American region and as the largest consumer country in the region, was one of the first developing countries to realise that efficiency is the only way forward.

As part of the drive to more efficient consumption, Brazil along with China and India has signed up to the World Bank's Three Country Energy Efficiency Programme. According to the World Bank, cost effective retrofits in buildings and factories could reduce energy use by at least 25 percent in Brazil and Brazilian cities have also begun to remodel energy consumption through energy service companies.

An energy service company is a private company that assesses the potential for energy savings in a public or private client's facilities and then designs and implements energy saving measures. These measures include, installing low energy light bulbs, upgrading old industrial air conditioning and refrigeration systems, and improving insulation, natural ventilation and light.

“Cutting energy waste is the cheapest, easiest, and fastest way to solve many energy problems.” — World Bank

“Cutting energy waste is the cheapest, easiest, fastest way to solve many energy problems, improve the environment and enhance both energy security and economic development,” says Robert Taylor, a World Bank energy specialist.

A recent Inter-American Development Bank report shows exactly why Brazil is seeking energy efficiency and not new capacity. According to the IDB, if Brazil's energy demand continues to grow at the anticipated rate of 3.5 percent per year and the country does not become more energy efficient, it will need to build the equivalent of 132 gas-powered open cycle generation plants to produce the same 57,800 GWh of electricity per year.

In dollar terms, it will cost USD 21.5 billion to build the new plants — against USD 6.7 billion if they introduce energy efficiency schemes.

The savings in energy costs are often used to pay the ESCO back the capital investment of the project over a five- to 20-year period, or they are reinvested into the building to allow for capital upgrades that may otherwise be unfeasible.

“One of the biggest risks banks saw in an energy service company project in Brazil was the technical risk, in that the project would not meet its savings objectives and therefore future conditional cash flow would never materialise,” says Pierre Langlois, president at Econoler International, which is consulting on the establishment of Brazilian energy service companies.

The United Nations Development Programme and the Global Environment Facility, a USD 4 billion fund set up by donor countries which focuses on climate change, ►



Cities like Rio de Janeiro were one of the first to realise that energy efficiency is the only way forward

PHOTO © JONAS MELLQVIST

have tackled technical risk by collaborating with the Inter-American Development Bank to establish a new financial tool, the Energy Efficiency Guarantee Mechanism. This operates effectively as an insurance product for the lending banks against the risk of technical failure by the energy service company in

its mission to reduce consumption and make the projected savings on energy costs.

The importance of the project lies not only in the environmental benefits for Brazil but also for the rest of the world.

“This is very important in the sense that if we do it right in Brazil we should be able

to replicate it in other countries,” says Peter Stevenson, Principal Investment Officer at the Inter-American Development Bank. “We see this as a pilot project that may stimulate banks to invest in further energy efficiency projects.”

Some energy companies dedicate 0.25 percent of annual revenues to energy efficiency projects in customer facilities and general conservation education efforts. The wire charge fund provided about USD 250 million to efficiency initiatives between 1998 and 2004 and many utilities work with energy service companies to fulfill these requirements, helping the industry grow.

Financial benefits for Brazil in developing the industry are also a key motivator, and its success could prove to be the impetus for the blossoming of a domestic industry. “This is not about attracting foreign energy service companies,” says Mr. Langlois. “It’s about building an ESCO market within Brazil that is strong enough to operate by itself.” ♦



By 2030 the use of coal could rise by 73 percent according to the International Energy Agency

PHOTO © STEVE EDWARDS

Note: this article is based in part on interviews conducted for the IDB magazine *Multilateral*.

Habitat Business Award for Sustainable Urbanisation

The award aims to recognise and publicise outstanding achievements contributing to sustainable urbanisation through responsible corporate practices.

The award comprises of a trophy and a commemorative certificate.

All for-profit commercial enterprises or businesses are eligible for this award.

Selection criteria:

1. **Impact:** positive and significant impact on improving the urban living environment.
2. **Sustainability:** lasting changes in improving the urban living environment.
3. **Innovation:** innovative approach to improving the urban living environment.
4. **Affordability:** affordable business models and technologies to improve the urban living environment of deprived settlements and households.

Outstanding achievement in five areas:

1. **Affordable housing solutions.**
2. **Sustainable water, sanitation and waste management, and urban infrastructure solutions.**
3. **Clean urban-energy solutions, mitigation and adaptation to climate change.**
4. **Innovative information and communication technology solutions for urban development and management.**
5. **Disaster mitigation and post-disaster reconstruction.**

The Habitat Business Award is presented by UN-HABITAT in partnership with the China Real Estate Chamber of Commerce (CRECC) and the All China Federation of Industry and Commerce (ACFIC).

Submit your best practice at www.unhabitat.org before 31 December 2008


On 30 March 2009, winners will be announced and notified.
The Business Awards will be presented in an Asian capital city by the end of April 2009.

The Olympic effect:

what price to stage
the world's
biggest
show?

PHOTO © Илья МОНТАСИО

Throwing the Olympic party places a city firmly on the map and brings opportunities to push ahead with redevelopment on a previously unimaginable scale. But there is a story often hidden behind the razzamatazz and sporting excellence: the human cost. According to a report released in 2007 by COHRE (Centre On Housing Rights and Evictions), more than two million people have been displaced by the Olympic Games in the past 20 years. The International Olympic Committee (IOC) is constantly reforming the regulations to which host cities must adhere, but the Beijing Games suggests that there is need for more changes yet. **Kirsty Tuxford** examines which host countries have been getting it right and how future hosts can improve on past Games.

A tall building under construction with a crane. The building has a distinctive diamond-shaped facade. A crane is visible on the left side of the frame, and another one is at the bottom. The sky is blue with some clouds.

Winning the right to stage the Olympics brings kudos, civic pride and tourist dollars. Cities jostle to catch the IOC's attention, in London's case getting the world's most famous sportsman David Beckham to appear in Singapore in what was a successful PR stunt to show the world that Beckham's city of birth was the only choice for the 2012 Games. But in a reflection on Beckham's own career, being an Olympic city is not just about looking good to the outside world because attached to that are a series of very lucrative contracts. In the build up to the games, local businesses can tender to upgrade transport networks, and initiate clean-up operations to set new standards to improve air quality while developers, banks, architects, lawyers and construction firms get to realise ambitious plans in the construction of new housing and sports facilities.

No wonder the politicians are as competitive as the eventual medal winners to win the race for Olympic nomination. But there is a harsh reality behind the public smiles of local mayors on building sites — forced evictions of residents have made a mockery of the ideals of the Olympic movement.

In the case of the most recent Games in Beijing, COHRE estimates that 1.5 million people have been forced to relocate due to the massive urban redevelopment plan, which has seen 5,000-year-old neighbourhoods known as "hutongs" razed to the ground in order to pave the way for avenues of new high-rise buildings, including hotels, office blocks and shopping centres. Many of these buildings were not directly required in order to stage the Olympics, but constructed as part of the general improvements to the city.

Sun Weide, the Beijing Games organiser spokesman has rebuffed accusations from COHRE regarding the number of people evicted. "There is no basis whatsoever for what they claim," comments Weide. "The fact of the matter is only about 6,000 families have been involved in the Olympic relocation programme."

UN-HABITAT published figures in 1999 indicating that 720,000 people were forcibly displaced by the 1988 Seoul Olympics. And while for the 1992 Games in Barcelona "only" 624 families were evicted and relocated, many of whom were Roma in origin, the Spanish city did suffer a post-Olympic

hangover in the cost of housing, which increased substantially between 1986 and 1992 and excluded poorer residents from renting or buying in the city.

The COHRE study Fair Play for Housing Rights: Mega-Events, Olympic Games and Housing Rights states that the homeless, the poor, and minorities such as Roma and African-Americans have been affected the most.

Lessons from previous Olympics were still being ignored by the time the Games arrived in Atlanta in 1996. To prepare for the 1996 Games, the authorities attempted to rid the streets of homeless people by criminalising vagrancy, and during 1995 and 1996, 9,000 arrest citations were served to those with no fixed abode. The 2007 COHRE report says: "The Olympic Games was a significant aggravating factor in the deterioration of the housing situations for low income and African-American populations living in Atlanta."

Sydney was a temporary — and welcome — blip in 2000. There were no forced evictions. Unfortunately it did not last. Athens in 2004 chose to go back down the eviction road and forcibly displaced 2,700 Roma although COHRE praises some aspects of the 2004 Olympics in that the Olympic village now provides subsidised housing for 3,000 families.

Unfortunately, the impact on local housing and people is not on the IOC's list of priorities, which is why forced migration takes place almost silently. The current themes in the IOC's bid questionnaire include: political and social support, general infrastructure, sports venues, Olympic Village, environment, accommodation, transport, security, past experience, finance, and legacy. In their 2007 report COHRE concludes: "No specific information is required from Candidate Cities concerning the potential negative impact on local housing, the displacement of local communities, or strategies to remedy or minimise potential harm. This failure to require the provision of targeted information is a regrettable deficiency in the current selection process."

The need for a secure and green environment

But while the Olympic Committee may not yet have fine-tuned their regulations when it comes to protecting local communities, they have worked hard to provide more stringent guidelines for host cities on security, transport and the environment. ►

As far back as 1984, when Los Angeles hosted the Olympics, the city clamped down on car exhaust emissions and Beijing's fight against smog was a heavy feature of news bulletins leading up to this year's Games. The relocation and temporary shutdown of several polluting factories and the heavy restrictions on traffic had a positive effect on Beijing's

Beijing's Internet technology also played a part in cutting congestion and consequently reducing pollution. Taxis were connected to China's next-generation Internet (CNGI) via IPv6 sensors, which directed them away from heavy traffic. CNGI was also used to broadcast events online and control venue facilities, according to the *Beijing Review.com*.

Greenpeace pays tribute to the use of technology in its August 2008 report *China after the Olympics: Lessons from Beijing* which praises the implementation of energy-saving technologies, including the launch of a fleet of buses run on compressed gas, the opening of the Guanting wind power station and the help given to 32,000 households who converted from coal heating systems to electric. For future Games, Greenpeace recommends that water-saving technologies should be applied, a zero-waste policy implemented and an internationally recognised timber procurement policy is employed in relation to the construction materials used.

Sydney is perhaps the best example of a Games which had excellent environmental controls as well as respect for people's housing. The city received praise for its solar-powered Olympic village and the self-powered stadiums, from which excess electricity was routed back into the national power grid. And rather than choosing to construct the main Olympic complex on land where poor communities were already residing – as Seoul, Barcelona and Atlanta had done – Sydney used government-owned wasteland.

As well as environmental considerations, security is another issue of paramount importance for the Olympic Committee. In 1996, Atlanta's organising committee naively ranked terrorism threats behind worries over heat-related illnesses and soccer violence and a bomb went off in the crowd killing two people. Since then security has been key to staging an Olympic bid. In 2004, the Athens Olympics were protected by the most expensive security operation in Olympic history. According to a report in the *Wall Street Journal* on 22 August 2004, Greece deployed 70,000 troops and installed more than 1,000 high-tech surveillance cameras. China employed more than 100,000 security personnel during this year's Games, plus surface-to-air missiles within range of sports venues, according to a report by *Aljazeera* news on 6 August 2008.

Tight security measures are essential, but so is the necessity to provide efficient, cost-effective and environmentally friendly transport. Beijing ordered half the city's vehicles off the roads during the Olympics, but compensated by mobilising 33,000 drivers and enhancing public transport. China's efficient plan illustrates how money spent on transport not only enables people to move around the city easily both during and after the Games, but also demonstrates a knock-on effect of cutting pollution through reducing car exhaust emissions.

Sustainable development and the re-use of buildings are also essential. The infrastructure built has to provide a lasting legacy while considering the needs of the local population. London's 80,000-capacity arena will be converted into a 25,000-seater stadium for use by local community sports clubs after the Games and its Olympic village will be used as 3,500 affordable homes with parks, open spaces, community facilities and transport links.

Sebastian Coe, Chairman of the London Organising Committee wants London to be the first "public transport" Games. USD 30 billion (STG 17 billion) is being spent on transport: 10 rail links, a 12-carriage Olympic Javelin shuttle, new buses, and refurbishment and upgrading of the London Underground. A plan for an east-west rail link had previously been shelved, but the Olympics has made its construction possible.

On the surface, hosting the Olympics is a noble endeavour, but the aspirations of potential host cities to stage the world's biggest sporting event are often based not on global unification but a desire for urban redevelopment – which has both positive and negative consequences. The Olympics has enabled all of its host cities to enjoy the benefits of improved transport systems, cleaner air, more effective security, employment opportunities and a higher standard of sporting venues. Host cities should be encouraged by the IOC to realise, that although staging the Olympics provides a fantastic opportunity to improve their city – and to attract investment and tourism – it is wrong to sweep aside the lowest socio-economic groups who reside in areas that are used for Olympic infrastructure. The IOC has worked hard to choose cities which propose sustainable development but it should also ensure the benefits brought by the Olympics are benefits for all. ►



Since Atlanta, security has been key to staging an Olympic bid

PHOTO © LARS SUNDERSTROM

smog-filled air. Despite media criticisms in the lead-up to the Games, the situation improved in time for the opening ceremony.

The environmental race for 2016

	PROS	CONS
MADRID	<ul style="list-style-type: none"> Madrid has promised that Olympic village housing will be available for people of different income levels after the Games, which should benefit residents as Madrid's house prices are among the highest in Spain. Madrid's bid claims to involve no evictions. 	<ul style="list-style-type: none"> The city needs work on the quality of its air. COHRE say that the media refused to publish a bulletin by Ecologistas en Acción concerning the poor air quality in the city, before the visit of the IOC Evaluation Commission.
CHICAGO	<ul style="list-style-type: none"> The city has federal funds for security and transport and while Chicago says its existing transport network is sufficient, there will be upgrades to enhance the network with extra shuttles. Existing sports venues will be utilised and although the main stadium will be a new building, it will be re-used by the local community after the event. A significant aspect of Chicago's bid is that the Olympic Committee is partnering with non-profit organisations: ICLEI - Local Governments for Sustainability, the Environmental Law & Policy Center, the Center for Neighborhood Technology and Friends of the Chicago River, to ensure the "greenest bid ever". 	<ul style="list-style-type: none"> The theme of evictions rears its ugly head again: under threat is Grove Parc, a subsidised housing complex. There is already a campaign to save it.
TOKYO	<ul style="list-style-type: none"> Security: it boasts one of world's biggest police forces and the Metropolitan Police Dept would be ultimately responsible. Tokyo's bid also details the state-of-the-art security systems planned for use. As host to the 1964 Olympics, Tokyo is in the excellent position to use the existing framework of buildings and infrastructure, thus enabling the pursuit of sustainable development. Some new sports venues will be constructed but 68 percent of the buildings needed are already in existence. The Olympic village will be built on land already designated for housing development, with an environmentally friendly design: solar heating, solar power generation, reclaimed water and waste material recycling. Tokyo already has a 10-year-plan, which includes several measures to improve the environment and cut CO₂ emissions eg: Three ring roads are being built to ease congestion and thus reduce pollution, although the fact that life expectancy in Tokyo is among the highest in the world is testament to its already-healthy climate. Tokyo is proposing the use of an Intelligent Transport System to deliver on-the-spot information from control centres to roadside boards, about congestion and travel time. Beacon transmitters and FM/AM radio stations can also send this information to car navigation systems and car radios. 	<ul style="list-style-type: none"> A controversial element of Tokyo's bid is the proposal to build a 100,000-capacity stadium in Yoyogi Park, one of the last public green zones in central Tokyo. There is mounting opposition as many feel that the destruction of the park is not in line with the green policy that Tokyo is claiming for its bid.
RIO DE JANEIRO	<ul style="list-style-type: none"> Rio hosted the Pan American Games in 2007, which leaves it in a strong position in terms of the legacy of sports venues: 56 percent of the planned sports facilities already exist and they all meet Olympic standards. There would be no need to build an Olympic Village either, as the Pan American Village is still in situ and can house 8,000 residents – this fact also cuts down the chances of citizens facing eviction. When assessing environmental impact, the IOC looks to the Agenda 21 agreement. Rio de Janeiro is the place where the Global Agenda 21 (AG21) began. Rio's Olympic Committee say they would work with other host cities and the IOC to develop an Olympic Games Sustainability Plan if they win the vote to host the Games in 2016. Most significantly, among the aims of the plan to introduce more environmentally sound procedures, is the promise to improve social conditions particularly for disadvantaged communities, which is an aspect that has generally been neglected by cities, which forge ahead with evictions. 	<ul style="list-style-type: none"> The city's weak spot is its public transport system, which requires vast expansion to cope with the number of visitors that the Olympics would bring. The 2016 bid does not propose a metro system but instead a network of buses fueled by natural gas or biofuels.

World Habitat Day

UN-HABITAT awards top honour to Nanjing

Nanjing, host city for the 2008 World Urban Forum, has been awarded the UN's highest award, the Habitat Scroll of Honour Special Citation, in the World Habitat Day awards.

UN-HABITAT's Executive Director Mrs. Anna Tibaijuka joined members of the Angolan government for the global celebration of World Habitat Day on 6 October 2008 when the award winners were announced. The cities of Shaoxing and Zhangjiagang were given the Habitat Scroll of Honour Award, along with the Rwandan capital, Kigali, the Tatarstan city of Bugulma, in the Russian Federation, and Ciudad Juarez, a major Mexican city on the United States border.

The World Habitat Day prizes are conferred upon cities, governmental and non-governmental organisations, local authorities, public, private and research bodies, or individuals for outstanding achievements in the cause of sustainable human settlements. The awards, granted in person each year by Mrs. Tibaijuka, constitute global recognition of a city's achievements.

"The Awards this year show us that we can learn from the great strides made by all of these Chinese cities, especially at this time of global financial crisis," said Mrs. Tibaijuka. "Indeed, all of our winners this year have some answers when it comes to the financial crisis. All show that government has to take the lead and show commitment when it comes to affordable housing."

As scores of cities, schools, universities, governments and non-governmental organisations around the world used the World

Habitat Day theme, harmonious cities, to take stock of the state of their towns and cities at a time of rapid urbanisation caused by unprecedented urban growth and migration, Mrs. Tibaijuka urged the Angolan authorities to allocate 10 percent of their oil income to upgrade their towns, cities and villages for the benefit all, especially the poorest of the poor, and with respect for the human rights of all.

"We in the United Nations system have a responsibility to remind all countries, whether rich or poor, that they are not immune from the impacts of poverty," says Mrs. Tibaijuka. "And that is why, as we all worry how the global financial crisis will hit us as ordinary people, we must remind all again that investment in basic urban services and



Nanjing, host city for the 2008 World Urban Forum

PHOTO © RAIN RANNU

adequate shelter is essential. When we get it right we derive economic, social and health benefits for all." ♦

Fast facts: Nanjing

- Situated in Jiangsu province; it is one of the most economically alive provinces in China, with a population of 73.8 million people.
- Researchers from the Jiangsu City Evaluation Centre published a report in 2008 stating that Nanjing is the most sustainable city of all 13 cities controlled by the Jiangsu government. However, Nanjing is a highly industrialised city with established industries including electronics, cars, petrochemical, iron, steel and power at its heart. Foreign investment in the city is high, and on average, two foreign businesses set up there every day.
- Nanjing's location in the Yangtze River Delta makes it an important transport hub. The port in Nanjing is the largest in China, with an annual throughput of 108.59 million tons (2007 figures). Within the city there are 230km of highways, and an inter-city rail system, for which Asia's biggest railway station is being built.
- Nanjing has an efficient public transport system with 170 bus routes, and the city commenced construction of a metro and light rail system in 2005, which, when finished in the year 2050, will run to 433km in length. The motive behind the metro expansion is to reduce traffic congestion.
- The government plans to supply road-washing vehicles to eight districts south of the Yangtze River in an attempt clear the air of dust and clear the way for blue skies. In addition, the Nanjing Environmental Protection Bureau will control and monitor methods used on construction sites, municipal works and demolition projects, with a view to reducing pollution.
- The Nanjing Water Conservancy Bureau has pledged to check the water quality of rivers and lakes in the region on a year-round basis with the aim of maintaining pollution-free waterways.

Kenya

New school to build better housing launched

A UN-HABITAT training school sponsored by the United Nations Secretary General Mr. Ban Ki-moon with generous financial support of Norway and Finland is now teaching young people from the most deprived neighbourhoods of the Kenyan capital how to build better homes.

Known as the Moonbeam Youth Training Centre, it was born after Mr. Ban paid his first official visit to the giant slum of Kibera in January 2007. The Secretary-General said he was appalled at life in Kibera and promised that something had to be done.

But he urged young people to be patient.

Last September, the Pony Chung Scholarship Foundation of South Korea awarded Mr. Ban USD 100,000 which the Secretary General in turn donated towards uplifting the living conditions of youth in the informal settlements of Nairobi. This is seed capital for the training centre. UN-HABITAT has since received an additional USD one million from the Government of Norway and USD 135,000 from Finland in support of the youth training activities and empowerment at the Centre which will cater for Kenya and the entire Eastern African region.

Launching the programme, the Executive Director of UN-HABITAT Mrs. Anna Tibaijuka pointed out to about 300 youths from the slums of Nairobi in attendance that housing is a sector for the future and the young, because it takes time and needs a long-term engagement. She urged young people to take advantage of the opportunity offered by the Secretary General and the sponsoring donors to learn income-earning construction skills that will transform their lives. ♦



The slums of Kibera, Kenya

PHOTO © KARL H. MUELLER

China

UN-HABITAT Executive Director visits Olympic Games

China's Minister of Housing and Urban-Rural Development, Mr. Jiang Weixin, received UN-HABITAT's Executive Director, Mrs. Anna Tibaijuka in August when she was invited to the Olympic games.

"The President of the International Olympic Committee invited me to participate at the opening and closing ceremonies of the Olympic Games in view of the importance of sports activities in sustainable urbanisation," Mrs. Tibaijuka said.

She said most sporting activities are urban phenomena, and the Olympics like much else,

are taking place in cities. The planning of cities must therefore take into account the allocation of space for sports. However, in numerous cities and towns of the developing world many communities are denied space for sports and playing grounds. Children in the slums have to make do with playing on dirty footpaths and alleys.

"The IOC wishes to work with UN-HABITAT in this important area," she said. Mrs. Tibaijuka also travelled to Chengdu, in Sichuan Province, to discuss technical assistance and rehabilitation following an earthquake in May that claimed tens of

thousands of lives and destroyed countless of homes. She praised the government for its decision to station a Vice-Minister permanently in Sichuan Province to oversee the post-quake recovery programme, saying such a move gave confidence to the local people.

She said she appreciated the generosity of the Chinese government in hosting the Forum so soon after the earthquake. Mrs. Tibaijuka also met with China Development Bank President Mr. Chen Yuan in Beijing and agreed to establish a strategic partnership between the two organisations to promote finance initiatives for global human settlements.

The two executives said both organisations shared a commitment to promoting low and middle income housing and urban development and agreed to set up a task force to work jointly on priority issues in housing and infrastructure. UN-HABITAT and China Development Bank also agreed to finalise a cooperation agreement which is expected to be signed during the World Urban Forum in Nanjing in November. ♦

Cuba

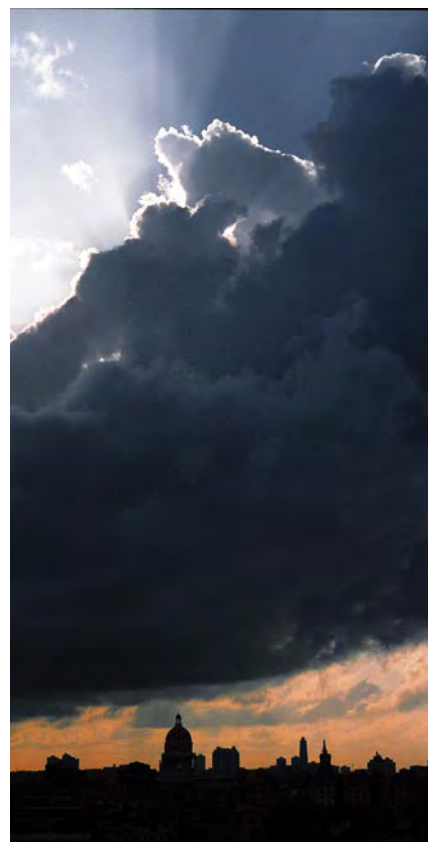
UN praises strategy for disaster management

Despite being hit by no less than four tropical cyclones during 2008's hurricane season, fatalities in Cuba are substantially less than for other countries which were affected, a testament to the country's impressive disaster management programme. Hurricane Ike followed Fay, Gustav and Hannah, which all hit within a three-week period and although more than 20 percent of the population were evacuated from their homes, Cuba's death toll was only seven. Even this is a high figure for Cuba, the Communist Party newspaper *Granma* reporting that most of the deaths were down to people not obeying evacuation instructions.

The UN and the International Strategy for Disaster Reduction have praised Cuba on numerous occasions for its effective management strategy in the face of hurricanes. Even

though Cuba does not have the resources of richer countries, education and community involvement help to ensure the safety of the population. A UN web TV report states that 98 percent of the population receive information about hurricanes through TV or radio. The UN's assessment of Cuba's disaster management strategy states: "All institutions are mobilised 48 hours before the hurricane is foreseen to hit the island, to implement the emergency plan, and measures such as massive evacuation are taken. Every individual has a role to play at the community level. Local authorities know who needs special care and how to assist the most vulnerable. Schools and hospitals are converted into shelters and transport is immediately organised."

Local residents keep the streets clean to prevent drains flooding and schools and civil defence authority hold classes to educate chil-



Cuba was hit by four tropical cyclones in 2008
PHOTO © LUCÍA CHACÓN

Chad

EU set to withdraw troops

Violence in Chad has led UN Secretary General Ban Ki-moon to propose that the Security Council should send 6,000 United Nations troops to replace a European Union force (EUFOR) in

eastern Chad and north-eastern Central African Republic (CAR).

The recommendation followed heavy criticism in September from the charity Oxfam, which says civilians are not being protected from violence in eastern Chad and that police forces needed urgent reinforcement. EUFOR joined together with the UN Mission in the Central African Republic and Chad (MINURCAT), which was established in September 2007, to bring stability to eastern Chad and north-eastern Central African Republic, where fighting had been rife.

But Oxfam in its report published in September 2008 says that their efforts have not been effective and that very few Chadian police have been given training. "One year on, this mission is incapable of effectively protecting civilians in eastern Chad and should be urgently adapted," says the Oxfam report.

"Almost half a million vulnerable people who fled their homes due to the conflict in Darfur and Chad are not adequately protected and are exposed daily to attacks, thefts, rape and forced recruitment."

The problem of protecting the people of Chad is exacerbated by the arrival of refugees from Darfur in neighbouring war-torn Sudan and the growing number of Internally Displaced Persons (IDPs). The UN reports that as of September 2008 there were 300,000 refugees and almost 200,000 IDPs.

"Only 320 Chadian police have been trained to provide security and they have yet to be deployed," said Oxfam in September 2008. The author of the report, Sally Chin, said that EUFOR is "ill-suited" to deal with banditry and criminality.

EUFOR's mandate is due to expire on 15 March 2009. In September they had 3,700

dren about what to do in the event of a hurricane. Every year there's a two-day training exercise in risk education and people perform hurricane drills; practicing packing up their belongings and evacuating their homes. Each neighbourhood has someone responsible for ensuring that all inhabitants are aware of approaching storms and that they can get to shelter. Farmers also herd their animals to high ground.

A recent UN report quotes Salvano Briceno, Director of the International Secretariat for Disaster Reduction (ISDR) in Geneva, the United Nations body that focuses on disaster reduction. "The Cuban way could easily be applied to other countries with similar economic conditions and even in countries with greater resources that do not manage to protect their population as well as Cuba does," says Briceno.

However, disaster management does not stop once the storm has subsided. After such a devastating hurricane season, Cuba is in need of international help. UK charity Oxfam estimates that close to 30,000 homes have been destroyed. The urgency now is to re-equip the people of Cuba with the tools they need to rebuild their infrastructure and regenerate their farmland. But at least, thanks to Cuba's intelligent disaster management planning, most of the population is still alive and able to work on rebuilding their future. ♦

troops in Chad, but it is not their role to act as police, but to protect civilians in danger. MINURCAT reported in September 2008 that they had plans to train a further 500 Chadian police, and their first deployment of 70 national police and gendarmes began their initial investigation of eastern Chad on 16 September.

Secretary-General Ban has praised MINURCAT for the progress made so far, but in order to enforce law and order and create a more secure society, much larger numbers of professionally trained police will be needed. Ban said: "Regional and local tensions, poverty, weak institutions and poor infrastructure compound the difficulties faced by local authorities in finding peaceful and sustainable mechanisms to address the causes and consequences of insecurity and violence." ♦

Climate change

London sets ambitious targets for 2025

London's congestion charge already cuts CO₂ emissions by 16 percent, but to improve on this London wants to cut carbon emissions by 60 percent by 2025. Plans are already underway to encourage London's population to take up cycling as a means of getting around the city. The first stage of the plan means that 6,000 bikes will be available every 300 metres, and signposted cycle routes will link all key areas of the city. The C40 climate leadership group report that the cycling plan will make a "significant contribution to tackling climate change, aiming to have one in 10 Londoners making a round trip by bike each day, and saving some 1.6 million tonnes of CO₂ (equivalent to driving round the M25 55 million times) per year as Londoners increasingly choose to walk or cycle for short trips instead of taking their car."

Dalkia and Honeywell, world leaders in energy efficiency have been brought in to help cut energy use in Greater London Authority buildings by 25 percent. In fact, all public sector buildings in the city are being offered the chance to work with Dalkia and Honeywell.

The C40 Cities group report that "London's commercial and public sector buildings alone produce around 15 million tonnes of CO₂ per year and account for 33 percent of total London emissions."

Cities are high on the list of culprits when it comes to producing the CO₂ emissions that scientists say are contributing to global warming. Eighty percent of greenhouse gas emissions come from the world's cities, but those same cities only cover one percent of the earth's surface, according to the C40 Cities group. "Indeed, it is no coincidence that climate change is emerging at the forefront of international debate at the same time, and virtually at the same pace, as the world becomes urbanised," says UN-HABITAT's Executive Director, Mrs. Anna Tibaijuka. "It was why I pointed out in my report to the UN Economic and Social Council in 2007 that reducing the vulnerability of cities to the effects of climate change should and needs to be viewed as an opportunity to improve the living conditions of the most vulnerable segments of our urban populations." ♦



London's congestion charge cut CO₂ emissions by 16 percent

PHOTO © KEITH ROPER

Europe

Record numbers for European Mobility Week

More than 200 million people in Europe and around the world took part in the 8th European Mobility Week. Named as the biggest global event dedicated to sustainable urban travel, this year's theme of "Clean air for all" saw cities and towns participate in awareness-raising activities about the link between mobility and air quality.

Cities from Ankara in Turkey, Nicosia in Cyprus to Sofia in Bulgaria organised cycling events to promote newly opened cycle paths or held time races between bicycles and other modes of transport, to showcase the bicycle as a healthier and, in many cities, a faster mode of transport.

Budapest held various events relating to the theme of "Clean air for all" by closing streets and holding open-air cinemas alongside World Heritage listed sites.

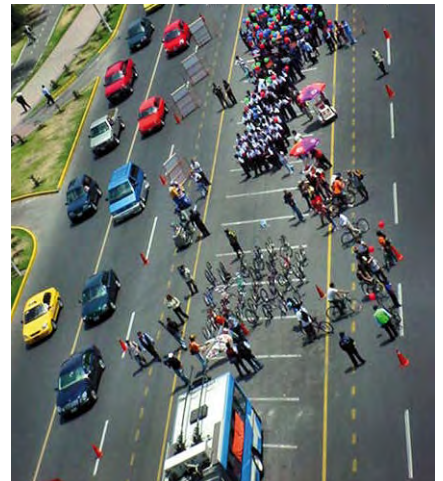
Mayor of Nicosia in Cyprus, Eleni Mavrou, said that the objective was to inform citizens of the harmful effects of fuel emissions and to look at innovative ways to minimise pollution.

"In Cyprus, there are on average 270 cars

per every 1,000 people, which means three cars per family." She added that roads in Cyprus are being made more cycle accessible, and old vehicles that pollute more are being phased out, with the promotion of electric and hybrid cars.

Awards are also given to cities that create a momentum around the week and implement initiatives for sustainable urban transport. Previous winners have included the city of Almeirin in Portugal, which built oil chambers in key places in the city. The chambers collect oil from households and restaurants to be transformed into bio-diesel, which will be used for municipal, fire brigade and public transport vehicles.

Peter Staelens from Eurocities, which organises the week, says that the event is appealing to not only cities in Europe, but also all cities that are concerned about transport, pollution and climate change. "It was an evolutionary process that began two years ago. Now cities in Canada, Japan, South Korea, Colombia and Brazil want to hold events. The list is growing every year." ♦



Ecuador is one city outside of Europe to participate

PHOTO © EUROPEAN MOBILITY WEEK



Tenerife in Spain showcased its new tramline

PHOTO © EUROPEAN MOBILITY WEEK



Bicycles were highlighted as a healthier mode of transport

PHOTO © EUROPEAN MOBILITY WEEK



Streets in Spain were closed to cars for all to use

PHOTO © EUROPEAN MOBILITY WEEK

Reaching out to young people

UN-HABITAT works closely with some of the world's leading popular artists and musicians. Great stars like MV Bill from the "City of God" favela in Rio de Janeiro, Brazil, La Etnnia from Colombia, Nikke Posse from Greenland, Gidi Gidi Maji Maji from Kenya, Godessa from South Africa or La Mala Rodríguez perform around the world as UN-HABITAT Messengers of Truth. And every two years it has become something of a tradition to hold a rock or hip-hop "party of purpose" to raise awareness on matters ranging from women's rights to urban slum conditions. Two of the greats, Messengers of Truth Rolf Stahlhofen, of Germany, and Lam Tunguaar, of South Sudan, recently told two very different and passionate stories to UN-HABITAT staffers **Hawa Diallo**, **Tom Osanjo** and **Eric Orina**.

Rolf Stahlhofen

His personal quest: To raise money so that the poor get water and sanitation. "My motivation as a Habitat Messenger of Truth is that you can change the world if you do something. I have a happy life with a family and a small cute baby. But I know many people who aren't happy. It is very satisfying for me when through one concert you get 25,000 people to make a donation, indirectly. Fifty or 60 years from now I hope to be singing and using it to change something. It is not a big deal for me; it is a very normal thing to do. With music you can motivate people to do something."

His wake-up call: The huge flood in eastern Germany in 2002. He founded the non-profit association, Menschen am Fluss e.V. (People on the River). "In Germany it is easy. You simply open a tap and you get water. In Saudi Arabia water is very precious; in Nigeria drinking water is very precious. Dad kept telling me not to play with water. When I came back to Germany I started telling people to stop playing with water, for example by not taking a shower for too long. I don't like the idea that there are industries that make profit from selling water. Water is a human right because humans are 70 percent water, and so is the earth. My dream is that every human being in the world has free access to water."

For Rolf Stahlhofen, water is life. Born in the Bavarian countryside on 21 April, 1968, he grew up in Germany before moving to Saudi Arabia with his father, an engineer. They lived in Jeddah for three years before they moved to Nigeria for two years, Algeria for a year before returning to Europe. He developed an interest in water during these travels with his father.

How he did it: By inviting well-known international and national stars to a big benefit concert for the flood victims in Mannheim, Germany. All the money raised from the concert was given to the people of eastern Germany, mostly families who had not received assistance from the German government, to help rebuild their homes and youth clubs. ►



"With music you can motivate people to do something," Rolf Stahlhofen

PHOTO © ROLF STAHLHOFEN



Lam Tungvaar is now a UN-HABITAT Messenger of Truth

PHOTO © LAM TUNGVAAAR

When it all began: After a long stint in the music business as tour manager and producer for top stars including Ice T, Public Enemy, the Rolling Stones, Madonna and as tour manager for Michael Jackson in Germany and Europe, he eventually became a musician at 25. “I never thought to record, but when I started to play and people liked my music, I went on to start the Mannheim Soul Orchestra, which became the number one band in Germany in 1999. Locally music is very strong in these countries. Music is a lifestyle, and it sounds like the country. You have strong sounds in Nigeria, while in Saudi Arabia the music is melancholic because it is hot, and people therefore prefer slow music.”

How it works: Because of the huge success of the first concert, on 3 September 2005, Stahlhofen invited more big names to the new SAP Arena in Mannheim. Stars including Mousse T, Emma Landford, Sasha, Söhne Mannheims, Peter Maffay, Jim Kahror Silbermond performed for five hours in front of 10,000 fans, backed by the Mannheim Soul Orchestra. The money raised was used to build solar-powered water pumps in seven villages in Eritrea, with technical assistance from the World University Service and Your Voice Against Poverty, an initiative founded in 2001 by popular artists, scientists and ordinary people seeking to ensure that govern-

ments of the world keep the promise pledged in the Millennium Development Goals. “We gave those villagers a fair chance to work themselves out of their poverty, where they find themselves because of circumstances beyond their control. Every euro we got out of the concert was invested in this project. Now, normal life has developed in the villages. Because of the water stations, children can go to school again. They don’t have to walk for hours to the next water hole any more. People from other parts of the country have settled there and the community is growing.”

Lam Tungvaar

His personal quest: To get youth in south Sudan to hand in illegal weapons and bring peace to a troubled region. “I want all young people to be given a chance in life. They should not be made to suffer from unnecessary wars, poverty and other harmful practices because with good opportunities, young people can achieve much more than we can ever imagine. And that is my prayer.” And that fits perfectly with his own name because in his Nuer ethnic dialect, his name means prayer.

His wake-up call: Yanked from a large family of 70 siblings (his father had 21 wives),

Lam was forcibly recruited into the Sudanese People’s Liberation Army (SPLA) at the tender age of seven. “The issue of escape never arose because the commanders were ruthless with those caught trying to get away. And then again, where would a young boy go in the rough and wild battle front.” The fact that Lam today is a musician who rocks shows in London or Nairobi as easily as in Juba, the regional capital of south Sudan, is a story of extraordinary personal courage and perseverance for someone who witnessed at so young an age the worst horrors of war.

How he did it: The SPLA engaged the Sudanese government in a long running war, fighting for self determination. This culminated in a peace accord signed in Kenya in 2005 finally giving the southern Sudanese some autonomy in running their affairs. “Times were tough up to then. Here we were, barely 10 years old and we were already being trained as killing machines. The guns were heavy, the marches long and difficult, and many died in the process. By sheer determination I held on.”

When it all began: The turning point came at the battle of Kejo-Keji when the Sudanese armed forces inflicted heavy casualties on the SPLA and everybody scattered. Lam and seven of his young buddies ran away. They trekked for 27 days until they found themselves at Lokichogio, a border town between Kenya and Sudan. After a long stand off with the Kenyan security forces (the youngsters were armed with guns and grenades) they eventually understood through a translator that the Kenyans meant no harm. They wound up in a refugee camp. He was found by an uncle exiled in Kenya and sent to school. “I was studying IT at Nazarene University in Nairobi. And then the music bug bit!”

How it works: He teamed up with some Sudanese friends. “We started doing songs and moved to London. But soon I realised home is East Africa – Sudan – and I later reunited with my family in Juba where my father is a Member of Parliament. Last year, I was appointed a UN-HABITAT Messenger of Truth. And now I lead the campaign to enlighten the youth on the importance of surrendering illegal guns.” He also heads the South Sudanese Artistes Association which comprises more than 2,000 Sudanese entertainers inside and outside the country. In April he held a sold-out concert in Juba and will follow it up with another one in September. His parting shot: “Give youth a chance.” ▶

UN-HABITAT working with young men and women

The UN system officially defines youth as those aged 15-24. Globally, children and young people under 24 account for roughly 40 percent of the global population. Indeed, young people, many in the developing world condemned to live on the streets, are on the frontline of growing urban poverty, child trafficking, sexual exploitation, high unemployment, crime and violence, HIV/AIDS and other diseases.

- One out of three people in the developing world is under 14.
- In the developing world today, 57 million young men and 96 million young women are illiterate.
- One out of three people in the developing world is under 14.
- Over 70 million youths globally are unemployed, the majority in developing countries.

UN-HABITAT recognises young people as active participants in the future of human settlements, the UN parlance for towns

and cities. UN-HABITAT fosters partnerships with youth organisations. It works with partners like Stahlhofen and Lam to ensure their voices get heard on the world stage. Working with young men and women and understanding their diverse abilities, realities and experiences is an essential element of UN-HABITAT's drive for sustainable urbanisation.

Other UN-HABITAT departments that engage with young people include the Safer Cities Programme, the Sustainable Cities Programme that deals with environment, the Training and Capacity Building Branch and the Water and Sanitation team, which is promoting water conservation widely in schools and local communities in many developing countries, as well as the Youth Empowerment Programme that is imparting skills in construction technology to promote access to affordable housing and improve the livelihood of young people, for example through the Moonbeam Youth Training Centre in Nairobi. ♦

Engaging

UN-HABITAT has devised a Youth strategy for enhanced engagement that works directly with youth-led groups.

Informing

UN-HABITAT recognises young people as key to the future in an urbanizing world. Young people need to be informed of every opportunity to which they, like everyone else, have an equal right.

Advising

A policy dialogue on youth, children and urban governance has been developed to promote dialogue and action on giving young people a role in urban governance.

Connecting

UN-HABITAT initiates partnerships with youth organisations around the world. The agency regularly invites young people to its big international gatherings, like the World Urban Forum, so that their voices are heard on the world stage.

Empowering

UN-HABITAT is setting up a series of computerised One-Stop youth information resource centres to help young

people living in poverty equip themselves better for employment through vocational training, apprenticeships.

Consulting

UN-HABITAT's Urban Youth initiatives seek to engage and empower young people in urban poverty reduction responsibilities. It sees consultation and listening as a key to youth-led development.

Doing

Starting with the continent facing some of the greatest poverty challenges, and in the context of the New Partnership for Africa's Development, UN-HABITAT has developed the Global Partnership Initiative on Urban Youth Development in Africa, the continent with the greatest problems. The initiative was started at the behest of governments which oversee the agency. This initiative was devised subsequent to a Governing Council resolution and in partnership with other relevant United Nations agencies, multilateral institutions and private foundations. This resolution also seeks to ensure "the active participation of UN-HABITAT in the Secretary General's initiative on youth employment". Some of the fruits of that resolution are the One-Stop Youth and We are the Future Centres.

Stockholm

18th World WaterWeek

As more than 2,000 water experts from 140 countries worldwide gathered in Stockholm in August for the 18th annual World Water Week convention, HRH Prince of Orange, congratulated delegates for helping reduce the number of people without access to water and sanitation around the world.

In a keynote address at the opening plenary, the Dutch Crown Prince Willem-Alexander, who serves as Chair of the United Nations Secretary-General's Advisory Board on Water and Sanitation, said that their years of work to achieve Target 10 of the Millennium Development Goals on halving the number of people without access to safe drinking water by 2015 was now starting to pay off.

"The number of people living without a supply of improved drinking water has now dropped well below one billion!" he said to loud applause. "More than half the global population now have piped water to their homes and the number of people using unimproved water supplies continues to decline. That is thanks to your hard work."

He thanked the Stockholm International Water Institute for emphasising sanitation in its conference theme this year – Progress and Prospects on Water: for a clean and healthy world with special focus on sanitation.

Like other speakers, he was quick to say that billions of people still lack access to safe drinking water, many suffering ill health because of poor sanitation, at a time the worsening food crisis vies with bio-energy for land and water resources, and when climate change shakes the overall global water balance. He pledged to continue raising awareness of the 2008 International Year of Sanitation both with the public and with world leaders at major gatherings such as the Group of Eight, and the UN's own review summit of progress on the Millennium Development Goals scheduled in September.

"Ladies and gentlemen, in the wake of the cyclone in Myanmar, the earthquake in China and the floods in the United States, 'water', 'sanitation' and 'water-borne diseases' seem to have become some of the most commonly

used terms in the media," he said. Yet only too often, the only response was crisis management rather than turning to some of the structural solutions the global community can offer to help prevent future disasters or at least mitigate their effects.

He was at pains to tell the delegates, whose numbers included government ministers, scientists and activists, that the International Year of Sanitation had made great strides in breaking the sanitation taboo by bringing "un-



Dutch Crown Prince Willem-Alexander
PHOTO © SIWI AND THE WORLD WATER WEEK, 2008

mentionable subjects" like toilets and faeces out of the shadows and into the open.

His views were echoed by Honourable Ms. Gunilla Carlsson, Sweden's Minister for International Development Cooperation who started her address by stating how important it was that earlier in the day she had been able to use a clean toilet for women only – something still denied to many millions of women and girls around the world.

Citing attacks on women around the world on their nightly trudge to to relieve themselves, she added: "Without access to water and sanitation, we cannot improve health and education."

Stockholm's Mayor Sten Nordin, in welcoming remarks, recalled that when a toilet was installed

in the Swedish royal palace in 1770, the public at the time considered it something unnecessarily extravagant. Other keynote speakers at the conference included Malagasy President Marc Ravalomanana, and this year's winner of the Stockholm Water Prize, British Professor John Anthony Allan.

At a special seminar in Stockholm on the eve of the convention, UN-HABITAT warned that millions of people around the world still lacked access to basic sanitation.

To reach the goal of the Johannesburg Plan of Action of halving the proportion of people without access to sanitation, UN-HABITAT reported that to reach the target an additional 1.47 billion people would have to get access to basic sanitation before 2015.

The seminar was chaired by Mr. Bert Diphooorn, Acting Director of UN-HABITAT's Human Settlements Financing Division. "As a whole this target means doubling the rate of progress of the last decade in rural areas," said Mr. Diphooorn. "For urban areas, it means even more – since it is here that the current numbers almost certainly underestimate the lack of access experienced by slum dwellers and those who live on the margins of cities and towns."

The agency reported that official statistics suggest that somewhere in the order of 2.4 people billion do not have access to 'improved' sanitation. Eighty percent (1.9 billion) live in Asia, 13 percent (0.3 billion) in Africa, and five percent (0.1 billion) in Latin America and the Caribbean. Speakers at the session included Ms. Amy Leung, Director of the Social Sectors Division of the Asian Development Bank in Manila and Dr. Sara Ahmed, Chairperson, Gender Water Alliance, India.

In another word of warning from the Stockholm convention, corruption was cited as a major factor disrupting efforts to increase clean water supplies in poor countries. Up to 45 percent of costs for providing clean water around the world go toward corruption, said Transparency International Global Programmes Director, Mr. Christiaan Poorter. He said water production is particularly vulnerable to corruption because it involves large-scale infrastructure projects often burdened by several different ministries and official departments. He said corruption problems in water delivery also existed in wealthy nations in the Organisation for Economic Cooperation and Development. ♦

Nigeria

Abuja housing ministers' conference

President Umaru Musa Yar'Adua of Nigeria warned African housing ministers that governments had to move beyond just talking, and to act on the urgent task of delivering housing, utility services and pollution management.

He made the warning in remarks to 26 ministers and senior officials gathered in the Nigerian capital, Abuja, in July for the Second African Ministerial Conference on Housing and Urban Development (AMCHUD II). The meeting is a new regional forum backed by UN-HABITAT to help governments deliver on Millennium Development Goals aimed at reducing global poverty.

"Two out of every five urban residents in Africa today live in circumstances that are deemed life and health threatening," he said in a speech delivered on his behalf. "Be it in South Africa, Egypt or here in Nigeria, our people are confronted with the daunting task of securing decent and affordable housing, clean water supplies, efficient waste and pollution management, employment and urban transportation."

It was therefore time, he said, for governments to move beyond talking about acting on measures, as the situation is getting more difficult each day. If left unaddressed, the present trends would result in the what he described as "the urbanisation of poverty."

The ministers elected Nigerian Minister of State for Environment, Housing and Urban Development, Chief Chuka Odom, as the new Chairperson of AMCHUD, a position which will be jointly held with the Minister of Housing of the Republic of South Africa as the Co-chair. The Secretariat of the organisation will remain in South Africa.

"The crisis in sub-prime mortgage lending in the USA has caught that mighty country by surprise, and has already unleashed a negative contagion throughout a number of developing countries, leaving behind ruined capital markets, destroyed financial stability within households and financial institutions alike, and messed up productive assets," the Chief said. "Rising prices of food and fuel are increasingly eroding the gains achieved in the last decade, exacerbating the plight of the

urban poor, and posing a great challenge for urban management."

The Abuja summit of Housing Ministers will address the difficulties of overcoming the finance and resource challenges for sustainable housing and urban development.

The UN Millennium Project estimates that upgrading slums and meeting Goal Seven, Target 11 of the Millennium Development Goals on improving the lives of 100 million slum dwellers by 2020 while also preventing the formation of new slums will require investing USD 4.2 billion per year or USD 440 per person over the period of 2005 to 2020.

Most of the funding for slum upgrading will come from subsidies, loans, savings and self-help, donor contributions.

UN-HABITAT's Executive Director, Mrs. Anna Tibaijuka said recent experiences of the United States and Europe should provide useful lessons to African policy makers on the importance of political will as well as on the power of the housing sector and its inter linkages with other critical areas of socio economic development.

She said: "The housing and urban development sectors cannot just be left to the market without supportive institutions, without appropriate regulations and regulators. There is no place where such a laissez faire policy has worked. And if laissez faire has not worked in the developed nations who pay serious attention to the sector, why should Africa be the exception?" ♦



African ministers are in an uphill battle to reduce urban poverty and misery as shown here in Accra, Ghana

PHOTO © UN-HABITAT

Singapore First World Cities Summit

UN-HABITAT and the Asian Development Bank on 27 June celebrated five years of working together to improve water and sanitation in the world's most populous region.

As more than 5,000 delegates from 60 countries met for the inaugural Singapore International Water Week conference and the World Cities Summit, the two institutions used to the occasion to pledge tighter cooperation in their joint quest to achieve the Millennium Development Goals (MDGs) for poverty reduction.

"The Asia Pacific is a region of great diversity in all its aspects — populations, political institutions and socio-economic conditions, systems of administration, culture, ecosystems and availability of water," said a specially commissioned independent Report Card on the cooperation. Rapid population growth in the Asia-Pacific region over the past decade has forced more people to live in most vulnerable areas and has led to ever-increasing demands for water supply and sanitation services, which require greater investment in wa-

ter projects. Paradoxically, the countries in the region have been experiencing unprecedented economic growth with India and China, the two most populous countries of the world, being amongst the fastest growing economies.

"I am sure that the exchange of ideas especially on water solutions and applications will give everyone food for thought when we tackle the challenges we face in our own cities," said Mr. Yaacob Ibrahim, Singapore's Minister for the Environment and Water Resources.

The report warned that increasing urbanisation and economic growth in the region could lead to a dramatic reduction in poverty and achievement of MDG Seven Targets 10 and 11 — Reduction to half by 2015 the number of people who do not have access to clean water and basic sanitation and improvement in the lives of 100 million slum dwellers. It said access to safe drinking water supplies in the Asia-Pacific region had improved substantially in recent years (in 2002 around 3.16 billion people in the Asia-Pacific region had access to safe drinking water supplies). However, for-



Singapore Prime Minister Lee Hsien Loong with the new Marina Barrage project which combines water supply, flood controls and lifestyle attractions

PHOTO © SINGAPORE INTERNATIONAL WATER



Singapore Minister for the Environment and Water Resources, Dr. Yaacob Ibrahim

PHOTO © SINGAPORE INTERNATIONAL WATER WEEK

midable challenges remain. Approximately 669 million people still live without access to safe drinking water in the region. "The story for sanitation is even less satisfactory. Of the 2.6 billion people in the world without access to improved sanitation facilities, nearly two billion are in the Asia-Pacific region. Coverage for improved sanitation in the region lags behind the rate needed to attain the MDG target," it said. ♦

Energy

From fat to fuel in San Francisco

The mayor of San Francisco, Gavin Newsom, has announced a proposal to construct a 7.5 million to 10 million annual gallon capacity biodiesel production facility, which will turn grease waste from restaurants and other businesses into biodiesel fuel.

"Biofuels made from potential food crops are far from ideal, and those made from palm oil grown on plantations cleared out of the rainforest are anathema," said Mayor Newsom in a press release earlier this year. "San Francisco is setting the example by sourcing biodiesel locally, made from the sustainable feedstock of recycled fat, grease and tallow."

The proposal takes the form of an agreement between the Port of San Francisco and the maritime exportation company, Darling International. Plans are to build the plant near Pier 92 in the port's southern waterfront and construction should start within a year.

The agreement also states that Darling International will take an active part in beautifying the site area and improving the local environment.

San Francisco has already sanctioned a Mayoral Executive Order, which saw the city's 1,500 diesel vehicles convert to using B20 biodiesel (a blend of 80 percent petroleum diesel and 20 percent biodiesel) before the

end of 2007. When the new biodiesel works is opened, it will be another important step towards cutting carbon emissions for San Francisco. The authorities have set a goal to achieve carbon neutrality for City Government by 2020, zero emissions from public transit by 2020, a 75 percent recycling rate by 2010, and zero waste in 2020.

San Francisco is paving the way for other cities to adopt greener policies. Waste cooking fat is readily obtainable in every western city and in most other cities. With such an easily accessible and recyclable resource available, more cities should be exploiting this plan. ♦

Transport

Kawasaki to build world's fastest eco-train

Japan, already home to some of the speediest and advanced train networks, is developing what will be its fastest passenger train ever. Kawasaki Heavy Industries is developing the Environmentally Friendly Super Express (efSET) that will travel at speeds of up to 350km/h.

The Kawasaki team designed the train with lightweight aerodynamic components to reduce vibration and noise, and it utilises regenerative braking that recycles the kinetic energy created by movement.

In a country where fast trains are the norm, efSET will overtake the renowned Shinkansen bullet train (300km/h) as the country's fastest and will be completed in

2010. Kawasaki at this point will start building and selling the trains and hopes to outlay 10,000 kilometres of high-speed railway around the world. ♦



The efSET train will reach speeds of up to 350km/h

PHOTO © KAWASAKI HEAVY INDUSTRIES

Transport First hybrid motorbike launched in Japan

The world's leading motorcycle manufacturer, Honda Motor Co., is developing a gas-electric motorcycle that would use a hybrid drivetrain and could be in showrooms within two years.

The engineering difficulties, to build a hybrid motorcycle for mass markets, have previously been too much of a challenge and were left to smaller start-ups such as Zero Motorcycles to offer niche market electric motorcycles.

Now it is believed that Honda has discovered a way to make an electric engine small enough to fit into the narrow confines of a motorcycle frame. Japan's *Mainichi Times* says that Honda will offer the hybrids from 50cc to 100cc and will improve fuel efficiency by 50 percent. Sharing technology from Honda's hybrid cars will also keep production costs down. ♦

Bogota sets standard for other cities



Cali aims to improve on Bogota's Transmilenio system

PHOTO © ADRIANA McMULLEN

The Bogota Rapid Bus Transit system has won praise from around the world as a benchmark for rapid bus transport. It has led to similar systems being built in Jakarta, Indonesia and soon in Lima, Peru. Called Transmilenio, the Bogota system runs throughout the Colombian city with 850 buses, driving along segregated lanes, with special platforms similar to those used by trams for passengers to board. It has been hailed as a breakthrough in city transport reducing travel time by 32 percent, and reducing gas emissions by 40 percent — as a result of getting rid of 2000 public service vehicles — and by making zones around the trunk roads safer, it has reduced accidents by 90 percent.

Cali, Colombia's third-largest city has just launched its own version. Sergio Martínez, financial director for Metrocali, believes that while the system in Bogota runs very well, Cali has improved on it. "We have done several things differently while building our own network. The new system avoids Bogota's problems. Authorities there allowed many of the old inefficient private buses to remain on the streets, where they continue competing with the new system."

"Keeping buses on those routes will simply mean they compete against themselves. The system in Cali overcomes this problem by letting the private bus companies operate the new buses."

The first phase in Cali has 180kms of rapid bus lines and expected to carry 150,000 passengers a day that recently began in October. The second phase will add 90kms to the network and will increase capacity to 500,000 people per day, covering 98 percent of the city. ♦

Technology Innovative waste system for Kenya

Working in collaboration with two Kenyan engineering firms, UN-HABITAT has developed innovative tractor trailer systems and a little pick-up designed to meet the solid waste collection needs of small towns.

In a clear demonstration of public-private sector partnership which it has been championing, UN-HABITAT tapped Farm Engineering Industries Limited (FEIL) based in the western Kenya town of Kisumu and Ndume Engineering of Gilgil town, also in Kenya, to develop inventions.

The Ndume Little Pick-up has a flat deck body with a very low loading height. The flat body carries six or eight bins of waste which can be lifted on or off the pick-up by hand. In six of the seven towns, these Little Pick-ups will be used to provide a primary collection service, collecting bins of waste from businesses and residential premises and transporting them for transfer into large containers or low loading height trailers which will then be transported to the disposal site.

Training for operators and maintenance technicians was conducted in Gigil and

Technology

Satellites to help Lebanese towns rebuild



UN-HABITAT is monitoring the reconstruction of Lebanese towns that were hit by Israeli air raids

PHOTO © H. ASSAF

UN-HABITAT and the Lebanese Army have concluded a cooperation framework to promote and further develop nationwide Geographical Information Systems (GIS) using satellite photographs from space. The framework will be implemented “...in light of the common areas of interest of making available accurate and up-to-date geographic data and turning them into sound human settlements plans,” a joint statement said.

According to the statement, the DGA is providing the necessary support to UN-HABITAT recovery project in southern Lebanon with the aim of establishing three Local Urban Observatories in towns of Tyre, Bint Jbeil and Jabal Amel.

Under this cooperation framework, UN-HABITAT co-sponsored the DGA Fourth Arab Conference for Geographic Names held in Beirut on 22 – 27 June, 2008. UN-HABITAT took part in the parallel exhibition event where publications and documents were displayed and distributed to more than 100 attendants.

The agency is undertaking a series of recovery projects in Lebanon to respond to the massive destruction caused by Israeli air raids in July 2006. The “Good Governance for Post-War Reconstruction” project is a comprehensive programme co-funded by the Dutch, Cyprus and Finnish governments with a total budget amounting to EUR 1.8 million. Its main goal is to strengthen the capacities of local authorities, the union of municipalities and community representatives to plan, guide, monitor and control the overall reconstruction process of the 21 towns and villages hit in the raids. ♦

Kisumu where a total of 16 participants were drawn from some of the towns falling under the The Lake Victoria Region Water and Sanitation Initiative.

Pick-ups will be used to provide a primary collection service

They are Homa Bay and Kisii in Kenya, Bukoba and Muleba in Tanzania, and Kyotera and Nyendo Ssenyange (a satellite town of Masaka Municipality) in Uganda,

as well as from the border town of Mutukula on the Uganda /Tanzania border.

The training is designed to equip the participants with adequate knowledge and skills to ensure efficient operation and minimum downtime of the equipment, thereby improving the efficiency of the towns in solid waste management.

The Lake Victoria Region Water and Sanitation Initiative is a collaborative effort between UN-HABITAT, the Governments of Kenya, Tanzania and Uganda, and the Secretariat of the East African Community. It

supports small towns in the Lake Victoria region to attain the water and sanitation target of the Millennium Development Goals. Its objectives are to improve the water supply and sanitation coverage for the poor and to reduce the pollution of the lake from these towns. Under the Initiative UN-HABITAT is providing capacity building and grant support to seven towns in the Lake Victoria region to rehabilitate existing facilities and to improve local capacity for operations, maintenance and service delivery. ♦

Water

Tourist success for Singapore's new systems

As a resource scarce city-state, relying on most of its water supply from historical rival Malaysia, Singapore is aiming to reduce this dependence by introducing innovative technologies in water recycling and sewage.

Under decades-old treaties, which start expiring in 2011, Singapore buys more than half of its water from Malaysia. The water trade has sparked occasional spats between the two nations over pricing and other issues.

The planned “sewage super highway” is aiming to help reduce this dependency, and is already winning awards before its completion, due by the end of this year. Singapore's deep tunnel sewage system (DTSS) made up of a 48-km-long deep tunnel that stretches

from Kranji to Changi was awarded at the recent World Water Congress, Vienna.

The USD 3.65 billion system is a centralised wastewater treatment plant with a deep-sea outfall near Changi. It began in 2000 to cater to the country's increasing population and growing economy.

Director of Policy at the National Water Agency, PUB, Tan Yok Gin said that it will form an integral part of Singapore's water supply strategy as it allowed every drop of water to be collected, treated and further purified.

“Singapore has come a long way in its used water management, from the early days of the night soil bucket system,” Tan said in Vienna.

The Government in Singapore has even

turned this into a tourist attraction. Used water collected from homes and industries will be channelled through the deep tunnel to the Changi Water Reclamation Plant where it is treated to international standards before being discharged into the sea or sent to the NE-Water factory to be bottled — the city-state's very own brand of reclaimed water.

The factory where it is made had reportedly become so popular that the government decided to promote it as a must-see for tourists. In its first year of opening, the NE-Water visitor centre received more than 100,000 people.

Currently, there are four NEWater plants in Singapore. The fifth plant at Changi will be Singapore's largest. NEWater will meet about 30 percent of Singapore's total water demand by 2010, when it will also be completely connected to the new DTSS network.

“By collecting all the used water for treatment and further reclamation at one centralised plant, the DTSS allows us to recycle water on a large scale. Singapore's 5th NEWater Factory will be built on the rooftop of the Changi Water Reclamation Plant. When completed, the Changi factory will not only be the biggest in Singapore but one of the biggest in the world,” added Mr Tan. ♦



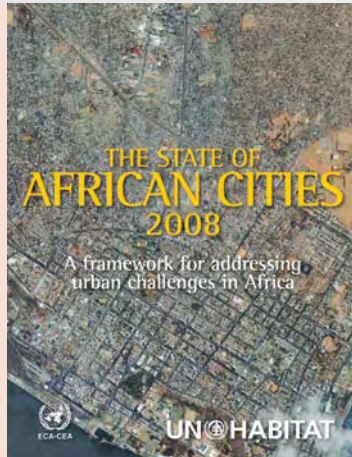
The new “sewage super highway” is aiming to resolve Singapore's water shortages

PHOTO © PUB

Highlights

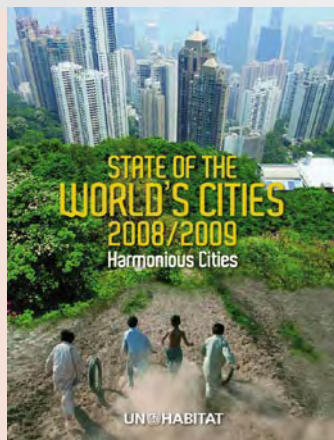
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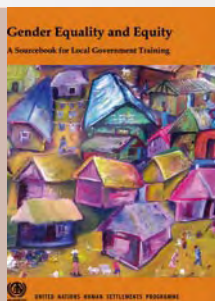
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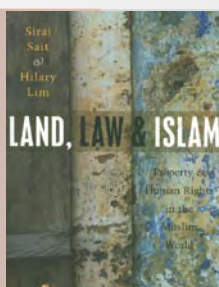
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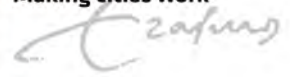
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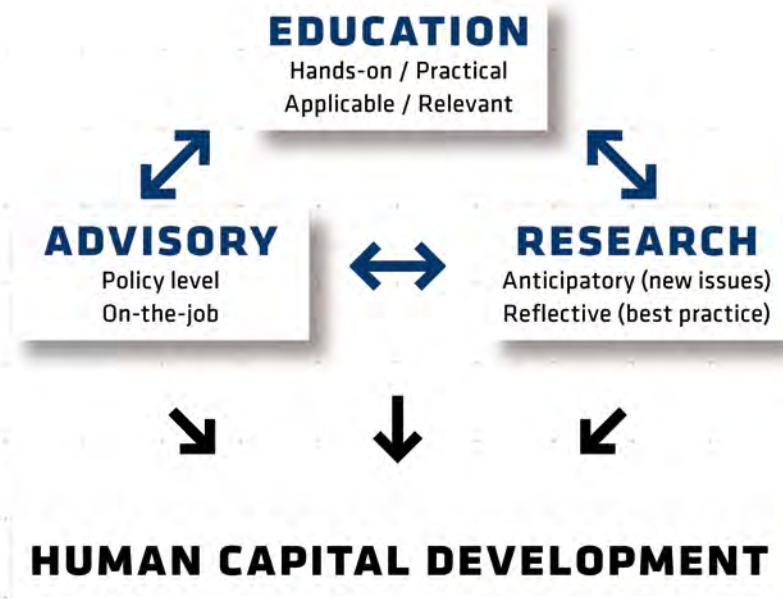
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